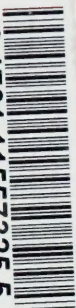



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GOVT PUBNS

ALASKA HIGHWAY PIPELINE INQUIRY

IN THE MATTER OF AN APPLICATION BY FOOTHILLS PIPE LINES  
(YUKON) LTD. TO THE MINISTER OF INDIAN AFFAIRS AND  
NORTHERN DEVELOPMENT FOR A GRANT OF THOSE INTEREST IN  
THOSE AREAS OF TERRITORIAL LANDS IN THE YUKON TERRITORY  
AS MAY BE NECESSARY FOR THE CONSTRUCTION AND OPERATION  
OF THE SAID NATURAL GAS PIPELINE AND THE WORKS AND  
FACILITIES CONNECTED THEREWITH AND INCIDENTAL THERETO,

AND

IN THE MATTER OF A BOARD OF INQUIRY ON THE SOCIO-ECONOMIC  
ASPECTS OF AN ALASKA HIGHWAY GAS PIPELINE.

BEFORE THE BOARD

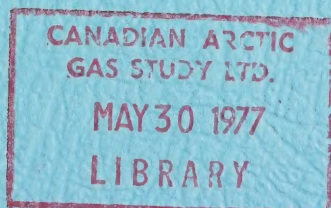
K.M. LYSYK, Esq., Q.C. CHAIRMAN

WILLARD PHELPS, Esq. MEMBER

MRS EDITH BOHMER MEMBER

PROCEEDINGS

VOLUME III



WHITEHORSE, Y.T.  
MAY 13, 1977







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Whitehorse, Yukon Territory

May 13th, 1977

PROCEEDINGS RESUMED PURSUANT TO ADJOURNMENT

MR. GOUDGE: I think, Mr. Chairman and members of the Board, I think any time you are prepared to reconvene, we are ready to proceed.

MR. CHAIRMAN: Before I call on Mr. Horton, I'll call Mr. Hollingworth, I understand there is something he wishes to say.

MR. HOLLINGWORTH: Yes, Mr. Chairman, members of the Board, on Wednesday at the opening of the proceedings, Mr. Marshall made a statement to the Board quoting from some evidence which was, as I understand it, filed for reading at the National Energy Board, and which at that time had not been cross-examined upon.

I have since been able to do some checking and been able to ascertain that Mr. Blair and other executives of both Foothills and Westcoast have made statements to the National Energy Board to the effect that if the Maple Leaf proposal of Foothills was not economically viable, and if the Delta connections required, or Delta reserves required connection to the marketplaces in Canada, and if the Government of Canada so desired, then Foothills would consider a connection from the MacKenzie Delta down the Dempster Highway, tying in with either an Alaska Highway Pipeline, such as has been applied for, or possibly an





1 alternative 48-inch line which would proceed down the so  
2 called Klondike Highway, that is to say veering off the  
3 Alaska Highway, coming into the Yukon approximately at Dawson  
4 and coming down to Whitehorse.

5 I would at this time like to reserve  
6 further comment until I have had an opportunity to obtain  
7 the transcripts from the National Energy Board and have a  
8 chance to peruse them, and I may wish to make a further  
9 statement to the Board at that time.

10 Thank you.

11 MR. CHAIRMAN: Thank you, Mr.  
12 Hollingworth.

13 Mr. Horton, are you ready to proceed  
14 with cross-examination?

15 J. ELLWOOD: Resumed

16 R. LITTLEDALE: Resumed

17 J. SAKER: Resumed

18 J. BURRELL: Resumed

19 M. MILLER: Resumed

20 CROSS EXAMINATION BY MR. HORTON, CON'T.

21 MR. HORTON: Mr. Burrell, I'll pick  
22 up where we left off yesterday. Again that's pages 6, 7, and  
23 8 of your filed evidence which at least inspires these  
24 questions.

25 I'm wondering, sir, if in the cost  
26 estimate, cost comparison studies that were done on this for  
conversion to natural gas from alternative energy sources





1 whether any particular attention was paid to possible industrial  
2 uses, as distinguished from the domestic heating, domestic  
3 cooking?

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Littledale, Saker, Ellwood, Burrell,  
Miller.

Cr Ex by Mr. Horton.

considered all uses

MR. BURRELL: The study which was done

of natural gas, the present situation plus those which were  
forecasted to occur.

Q What potential uses were  
forecasted to occur?

A What was done was, a  
very quick survey was done of the number of units that pre-  
sently exist, the number of residents, commercial and indus-  
trial facilities which presently exist, and then an estimate  
was made based upon Pacific Northern's experience as to how  
many would convert and in what time frame it would convert.  
As I mentioned yesterday in the case of an electrically  
heated facility, it was assumed they would not convert. Then  
as far as growth was concerned, based upon information that  
our consultants provided to them on population  
growth, there was an estimate made of the number of additio-  
nal units which would connect to natural gas, not only in  
the residential/commercial but as well in industrial in the years  
to come.

Q Do the comparison figures  
that you arrived at in any way take into account the possi-  
bility that there might in the future be industrial uses, being  
made of natural gas which are industrial uses simply don't  
exist here in the Yukon today?

A There was some allowance  
made but certainly there was no speculation as to any par-





1     ticular industrial load there was an allowance made to take  
2     into consideration some industrial and commercial growth  
3     based upon the present/<sup>the</sup>situation in Whitehorse, but should  
4     there be an industrial load materialize that was not account-  
5     ted here, then of course, that would reflect in the cost of  
6     the gas to the community. As we mentioned before the larger  
7     the gas requirements, of course, <sup>it</sup>then tends to reduce the  
8     unit cost because you have better utilization of your faci-  
9     lities. But we did not speculate on any particular large  
10    industrial load coming on.





1 Q Are you aware of any -- I  
2 will call them industrial uses of the gas that could be made  
3 by the mining industry?

4 A Yes there are, as a matter of  
5 fact---

6 Q What types of uses can the  
7 mining industry make of it? I suppose using gas fired  
8 thermal---

9 A Yes, for drying and so on.  
10 In addition I was just looking through here, but the  
11 Whitehorse Copper Mine was also included in this study.  
12 You were asking about mining applications, the Whitehorse  
13 Copper Mine load was -- had been included as a possible  
14 use for natural gas in the studies that we had prepared.

15 Q I believe yesterday, you said  
16 something to the effect that there is not, to Foothills  
17 knowledge, any limit on the amount of gas that could be  
18 tapped off the line as it comes down?

19 A Not to my knowledge, I  
20 suppose if you-- there may be a limit down the road if,  
21 for instance, it was determined that the reserves in Alberta  
22 were not sufficient enough to export gas out of the  
23 province, but as things presently stand, we don't see that  
24 as a problem at this point in time.

25 Q The whole process of tapping  
26 off natural gas up here and replacing it with Alberta





1 or Saskatchewan or B.C. gas is one that, in effect, would  
2 result in Yukon uses of the gas competeing with southern  
3 uses of the gas, is that not correct, potentially?

4 A Yes, it is a supply source.  
5 they are using a common supply source whether it be Alberta  
6 and down the road there would be frontier supplies also  
7 being connected because it is forecasted that frontier  
8 supplies -- that Alberta will not be able to supply all the  
9 requirements of Canada in our studies beyond say, the  
10 mid 1985's so they are expecting that it will be required  
11 to bring on frontier supplies and those frontier supplies  
12 would be available to Canadiana requirements of which the  
13 Yukon is a Canadian requirement.

14 Q So it makes sense for me to  
15 suggest then that ultimately the southern demand for the  
16 gas, down there, is a potential limiting factor on the amount  
17 of gas that can be tapped off here in the Yukon?

18 A I think you have to look at the  
19 total Canadian requirement.

20 Q Yes.

21 A Yukon would be treated  
22 similarly to, as I see it, to the total requirements in  
23 Canada. It would be part of the total requirements in  
24 Canada, such as, B.C. or Saskatchewan or Manitoba or Ontario.

25 Q Except that the Yukon is a  
26 very very small cog in a big wheel most of which is down



1 there.

2 A Well I don't see that as a  
3 particular problem. I guess if you look at some of the  
4 small communities in Saskatchewan you might relate that to  
5 the same condition and they are not expecting any problems  
6 in that regard.

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1 Q Now, turning over, I guess,  
2 primarily questions 13, 14 and 17, did the cost estimates,  
3 cost comparisons that were done, make any distinction between  
4 thermal electric and hydro electric? The costs of thermal  
5 electric and the cost of hydro electric?

6 A Oh, I see. The studies that  
7 were done for us?

8 Q Yes.

9 A Yes, well the studies which  
10 were done took into consideration the source of supply for  
11 a particular community, and in the case of Whitehorse there's  
12 a combined thermal and hydro supply, and our consultants took  
13 those into consideration. The cost of electricity from those  
14 sources and combined them to come up with a, say, an average  
15 cost which Whitehorse would experience.

16 Q So you averaged the --

17 A Yes, we took into considera-  
18 tion in determining the cost, or the consultants took into  
19 consideration in determining the cost, all the sources of  
20 electricity, or power.

21 Q Now, was, I just want to  
22 double check. My understanding from your evidence is that  
23 the cost comparisons that you did, led you to the conclusion  
24 that in many cases anyway, it would be economically feasible  
25 for the present fuel oil thermal to convert to natural gas  
26 thermal for the production of electricity. Is that correct?





Littledale, Saker, Ellwood, Burrell,  
Miller  
Cr Ex by Horton

1 A Yes.

2 Q Now, on my next question

3 arises out of question 18, which, I guess, sort of carries over  
4 from page 9 and page 10.

5 Were any studies done on the impact,  
6 on the physical and biological environment of the construction  
7 of lateral lines to service the communities?

8 A Well, I guess in the overall,  
9 the overall corridor was looked at and you have to appreciate  
10 that the laterals that we are talking about are very short  
11 distances and they are two, three or four miles, except, of  
12 course, for Watson Lake, which is longer, but specifically, no,  
13 but I would say that they would be contained within the corridor  
14 which we are studying. The main line. So in that sense they  
15 would have been considered.

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1 Q But where they would depart  
2 from this 120 foot corridor, isn't there.

3 A No, it's a wider corridor  
4 than that that they are looking at in the, from an environmental  
5 standpoint.

6 Q Yes. But those studies  
7 were not done with a specific view to possible lateral lines,  
8 insofar as they've been done at all, it's been in connection  
9 with the big line coming down?

10 A Yes, but I think that the  
11 length of the laterals are such that they would have been  
12 contained within the corridor which was studied.

13 Q Distribution lines. For  
14 example, well let's just assume that Whitehorse, some company  
15 sets up to distribute natural gas in the Whitehorse market,  
16 including domestic sources, now this gas gets to each house  
17 through a pipe --

18 A Yes.

19 Q -- and those pipes are going  
20 to be either underground or overground, one of the two, I  
21 suppose --

22 A They would be buried.

23 Q -- mostly likely buried?

24 A Yes.

25 Q To bury those lines that  
26 means there's going to have to be some ditching done?





Littledale, Saker, Ellwood, Burrell,  
Miller  
Cr Ex by Horton

1 A Yes.

2 Q Was any study done, either  
3 in relation to Whitehorse or any other of the communities  
4 about -- well, I suppose, sort of -- the socio-economic  
5 impact of that construction process?

6 A Well, the lateral, or the  
7 installation of distribution system was done in a manner  
8 comparable to what Pacific Northern Gas' experience is in  
9 northern British Columbia, and it means digging a trench  
10 in the roadway as you would to put in sewer and water lines.  
11 It's really no different from that other than the gas line  
12 is at a shallower depth.

13 MR. ELLWOOD: If I could just add to  
14 that, in doing manpower projections for the project, I did  
15 enquire with Pacific Northern what they estimated the crew  
16 size that would be required to install distribution systems.  
17 They advised me that they would expect perhaps two crews of  
18 six people each/<sup>to</sup>do work here in Whitehorse.

19 With that information, I felt it  
20 wasn't necessary to carry it any further.

21 Q Okay.

22 MR. BURRELL: I'm sorry, I was going  
23 down the track of a trench in the roadway, and I'm sorry,  
24 I really, I guess I didn't interpret your question properly,  
25 I'm sorry.

26 Q No, I was interested in what's





1 going to happen to Main Street and what have you, just to know  
2 whether any attention had been paid to that? The reason I  
3 ask is that it seems obvious that perhaps one of the selling  
4 points you're using, or one of the positive factors to your  
5 line coming down through the Yukon is the availability of  
6 gas for local use, and --

7 A Yes, and the techniques of  
8 installing the lines in the streets would be the same as  
9 those that have been used in installation of other distribution  
10 systems where the line is dug and, the trench is dug, the line  
11 is installed and it's backfilled, and if there's pavement,  
12 then the pavement is replaced.

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Littledale, Saker, Ellwood, Burrell,  
Miller  
Cr Ex by Horton

1 Q Are there already any  
2 existing contracts or arrangements between Foothills and  
3 any other company for, or sort of contingent contractual  
4 arrangements, they would have to be, for distribution of  
5 gas in the Yukon?

6 A No, there is not. Actually  
7 the awarding of the contracts to the distribution company  
8 does not lie with Foothills. It would lie with the City or  
9 YTG, or whatever.

10 Q Are you able to state some  
11 prediction of the number of years there would be of gas use  
12 in the Yukon on the assumption that there never was any  
13 Dempster Highway, or any other route, bringing Mackenzie  
14 Delta gas in to the Alaska Highway line?

15 A You mean --

16 Q How many years would the  
17 Yukon be able to rely on the gas supply?

18 A I would say that the Yukon  
19 could rely upon a source of supply of gas for as long as the  
20 rest of Canada could rely upon the source of gas, because it  
21 is part of Canada and it is part of the overall requirements.  
22 There will be, as I said, as the reserves in Alberta can no  
23 longer meet the Canadian requirements, then of course, there  
24 will be frontier gas brought on line, and that's made available  
25 to Canada in total.

26 Q Would it be correct for me





1 to suggest that in principle, or theoretically, there would  
2 be two main limiting factors on the length of the gas supply?  
3 First of all the amount of gas up there in Alaska that would  
4 come down the line, and secondly the supply down south in  
5 Canada? Canadian supply already down south?

6 A Well, I think as far as  
7 supplying Canada is concerned, certainly if there was, and  
8 there will be a limit in time, to that quantity of gas, but  
9 that affects all of Canada, not just the Yukon.

10 Now, as far as the supply from Alaska  
11 is concerned, there is, I think we mentioned or indicated  
12 earlier, that there would be about 28 or 29 years of supply.

13 My information is that there is a  
14 considerable supply of potential in the same area that is not  
15 included as proven reserves in Alaska, so that would extend  
16 the life, and in addition to that, at that point in time, the  
17 possibility also exists that the gas could be back-flowed if  
18 you want to call it that, up the line.

19 Q By back-flowing --

20 A I think Mr. Littledale might  
21 want --

22 Q Okay, maybe Mr. Littledale  
23 before you do, I just want to -- by back-flowing, you mean  
24 pumping it back up from down South --

25 A Well, that possibility--

26 Q -- in the event Alaska runs



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Littledale, Saker, Ellwood, Burrell,  
Miller  
Cr Ex by Horton

1 out before Canadian sources?

2 A Well, yes, that possibility  
3 exists. Whether in fact it will occur, I don't know, but it's,  
4 we're looking at many, many, many years down the road, so I  
5 wouldn't like to speculate on that.

6 MR. LITTLEDALF: I was just going to  
7 say, sir, as a matter of interest, there is a little gas  
8 production in the Yukon now, and my information has it that  
9 the exploration companies that are looking around feel that  
10 there is reasonably good potential in the southern areas of  
11 the Yukon for additional gas production. . So, whenever every-  
12 body is finished swapping things around, the Yukon might have  
13 its own gas supply.

14 Q Yes, but I want to sort of  
15 look at the worst possible picture, as well as the rosier  
16 possible picture.

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A Back - flowing gas

Q                      Okav. Let's assume that the Alaska supply which you already feel is at least twenty-seven years, 26, 27 years, and there is a lot of optimism that there is many more years, but let us assume that at some point in the future, be it 27 or 40, it runs out. It's dry. There's no more up there. But there's still gas down south from Canadian sources. Would it then be economical to backflow it up, backflow up that 40-inch line, the amount necessary to keep the Yukon going, assuming that it has to be backflowed from existing reserves in Edmonton, Saskatchewan, British Columbia?

A I'm not sure, and we're talking so far into the future, into hypothetical situations,



Littledale, Saker, Ellwood, Burrell,  
Miller.

Cr Ex by Mr. Horton.

1 but there is another possibility that if you are looking at  
2 the Yukon you could possibly run a much smaller supply over  
3 into here and backflow down to this way, if this line was  
4 for some reason or other was to be abandoned or whatever,  
5 and just sort of assuming everything went dead and you had  
6 this section in the Yukon, you might have to put in an 8 or  
7 10-inch line, or whatever, to feed this cavernous line that  
8 remains here may not appear. Now you are talking way into  
9 the future and in supposition, and so am I, and that is a  
10 possibility.

11 Q I would now like to ask,  
12 well pretty well the same question, Mr. Burrell, on the  
13 assumption that in addition to the Alaska Highway Pipeline  
14 draining the gas out of Alaska, there is some connecting route  
15 by whatever name you want to call it, bringing Mackenzie  
16 Delta gas into the Alaska Highway line, somewhere in the  
17 Yukon.

18 MR. BURRELL: You mean, you're  
19 making that assumption?

20 Q Let us make that assump-  
21 tion. That would extend the period of time in which there is  
22 going to be northern gas, arctic gas of some kind flowing  
23 through the Yukon, is that correct?

24 A The possibility exists,  
25 if you make the assumption that gas does come down the  
26 Dempster, then it would depend, of course, on the reserves which





Cr Ex by Mr. Horton.

1 are tied into the, into that supply source for that line.  
2 Here again it would depend on what those reserves were, and at  
3 what rate they were being taken out.

4 Q Now, there is some know-  
5 ledge of proven reserves up there now, is there?

6 A Yes, there is. But there  
7 is a tremendous potential --

8 Q But on the basis of the  
9 knowledge of proven reserves up there in the Mackenzie Delta  
10 area somewhere now. How many years extension do we get on  
11 top of the Alaska supply?

12 A Like I say, it's difficult  
13 to say, because it depends upon the reserves and the rates  
14 at which they are taken out. If you were to look at the  
15 potential for the area which Dome Petroleum, as you probably  
16 know are drilling in the Beaufort Sea, they have said that  
17 the reserves in that area were around 250 TCF which is about  
18 10 times what Prudhoe Bay has, as proven reserves now. But  
19 really, it wouldn't be honest for me to say that the reser-  
20 ves in the Delta would be such that they could be flowing  
21 gas from there longer than Prudhoe Bay. The possibility  
22 exists, but to say at this point in time, that will occur,  
23 I wouldn't be in a position to say that.

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Littledale, Saker, Ellwood, Burrell .  
Miller  
Cr Ex by Horton

1 I think the other point you have  
2 to look at too, is that technology being the way it is  
3 with continually advancing in all the aspects of the way  
4 we live, it is entirely possible that in the year -- well  
5 40 years from now or whatever, that solar energy will be a  
6 possibility and a number of people will be using that.  
7 It is hard to say. It is very difficult to really  
8 speculate that far in the future.

9 Q Yes, well I realize, but, I  
10 would assume that Foothills itself is making its proposal  
11 to build this line on the basis of known facts and what it  
12 believes will probably exist in the future, and I suggest  
13 everybody else who has to be involved in making any  
14 recommendations or any decisions related to the proposal  
15 has to go on the same basis?

16 A That is correct. It is  
17 put forward on financibility which is generally on 25 years,  
18 25 year life of a project, but, we certainly would expect  
19 and the potential is there that the facility would last much  
20 of the usefull, much longer than that, but from an  
21 application standpoint and from a financing aspect it is  
22 being considered 25 years. As I say, certainly the  
23 potential is that it would last much longer than that.

24 Q I want to put pretty well  
25 the same hypothetical question to you again, assuming gas  
26 from the Mackenzie gets piped in somewhere into the





Littledale, Saker, Ellwood, Burrell .  
Miller  
Cr Ex by Horton

1 Alaska Highway Pipeline somewhere in the Yukon -

2 A Yes.

3 Q Assuming that does occur,  
4 how and--- well let's assume also that the

5  
6 Mackenzie Delta is drained at the maximum rate possible  
7 how many years of supply would that add on to what we  
8 would be getting on what comes in from Alaska? Now you  
9 must be able to give some sort of prediction on that?  
10 You fellows have been actively involved with the reserves  
11 up there in the Mackenzie Delta anyway and piping them  
12 down.

13 MR. ELLWOOD: If I could just try  
14 to answer this. It wouldn't necessarily add on any years  
15 to the supply for the flow of this Alaska Highway line.  
16 If Mackenzie Delta reserves are brought on, one would have  
17 to have a project in place. Again, in a project of this  
18 nature it would be financed on a 25 year basis, you would  
19 expect then that there were 25 years of reserves. That is  
20 the criteria before you can get the financing--

21 Q Yes.

22 A -- for the flow that you  
23 have planned. The flow that would be planned would  
24 depend on the Canadian energy supply requirements situation  
25 so that if that Mackenzie Delta gas were brought on 20  
26 years after this Alaska Highway project went into service



1 it might add to it. If it were brought on two years after  
2 this line went into service, as far as you can predict based  
3 on the reserves available, and hence, the financing of the  
4 project they may both terminate for financial -- in financial  
5 terms at the same time.

6 MR. BURRELL: I think as an example  
7 I guess back in -- when they first started to sell gas  
8 outside of Alberta, if you wish, 1957, they were allowing  
9 permits for 25 years and that would have made it 1983,  
10 I guess when they would have terminated. The reserves in  
11 Alberta now are predicted to be capable of producing gas  
12 at this point in time beyond the year 2000, so I think what  
13 happens is that if you bring a reserve supply on and there  
14 is additional gas found and the amount of this additional  
15 gas, as in the case of Alberta, really determines the  
16 length of time which gas supply would be available. Of  
17 course, if you keep finding gas and if Dome's estimates of  
18 the reserves in that area are anywhere close to being right  
19 then you have a considerable amount of gas available for a  
20 considerable amount of time.

21 Q Am I correct in thinking that  
22 some or all of this Alaska Gas that would go through in the  
23 event your proposed line gets built down the highway  
24 is going to be servicing American markets, which at the  
25 present time are serviced, at least in part, by Canadian  
26 sources of gas.



Hiddle, Baker, Ellwood, Burrell  
Miller  
Cr. by Horton

1                   A       This would be incremental  
2       on top of the reserves or the volumes which are presently  
3       being delivered by Canada.

4                   Q       So then in effect the Prudhoe  
5       Bay gas going down into the States is not going to be  
6       relieving existing pressure on Canadian sources of gas  
7       generated by American demand for Canadian sources?

8                   A       I think recent studies show  
9       -- recent studies that have been performed show that  
10      Canada does not, in fact, have a shortage of gas, and that  
11      studies that have been done indicate that rather than  
12      requiring say the Delta gas for the Canadian market in the  
13      early 80's or 80 whatever, as was thought a couple of years  
14      ago the reserves from conventional sources, predominately  
15      Alberta, are such that they are capable of meeting the  
16      Canadian requirements through, at least, to the mid 1980's.  
17      Canada is not in a gas supply shortage situation, as is  
18      the United States.

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Littledale, Saker, Ellwood, Burrell,  
Miller  
Cr Ex by Horton

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Q So, you're saying that the way things stand right now, the intended use of the Alaska gas is simply to add on to Canadian gas from Alberta and wherever that is already going into the States, rather than to replace it?

A Well, it's not going to replace it, it's going to add on to already existing supply sources for U.S. markets, one of which is gas supplied from Canada.

Q Okay, now have there been any studies done by Foothills about, either above or below ground storage facilities in the Yukon to store gas for local use?

A No, there has not been any studies for storage facility in the Yukon.

Q Am I correct in thinking that it is possible for gas to be piped in from somewhere else and then stored in an underground, stored underground in natural cavities?

A That's a very common practice. It's done in Eastern Canada, and there's, it's done in the United States, it's done quite often.

Q Okay, now I'll turn over to page 11, I guess. Well, pages 11, 12, 13.



1                                   Answer to question 21, specifically,  
2 sort of, I guess it would be 21(a). Saying we intend to obtain  
3 supplies and services from local businessmen, businesses,  
4 providing this does not cause any unreasonable hardships for  
5 local residents, such as storages of supply or higher costs.

6                                   How does Foothills intend, or does  
7 Foothills intend to do any monitoring or checking in order  
8 to make it possible for Foothills to ascertain when unreasonable  
9 hardships for local residents start to occur?

10                                  MR. ELLWOOD: This situation would  
11 ordinarily be handled by competitive bidding process. So that  
12 in purchasing goods or services here, we will be requesting  
13 bids.

14                                  One of the factors to be considered  
15 in selecting your supplier then is his price, and if Yukon  
16 suppliers, if prices are rising here, we'll be purchasing  
17 elsewhere.

18                                  Q           Okay, now, rising elsewhere  
19 in relation to the price, an alternative price. Okay, but  
20 have you done any monitoring of prices in the Yukon right now  
21 for the goods and services? Everything from groceries to  
22 piping -- well I guess you're not going to be buying your  
23 pipe up here, but the goods and services that local businesses  
24 could bid on for supply. Have you already done monitoring  
25 to kind of establish what the base price situation is right  
26 now?





1                                   A           No, we haven't. We don't feel  
2 that that information would be necessary.

3                                   Q           Well, you seem to be stating  
4 as a policy that one thing you were going to try to do was  
5 to avoid placing an inflationary pressure on the existing  
6 prices and existing supplies here in the Yukon. Now, I'm no  
7 economist, but it kind of seems to me that if all of a sudden  
8 Foothills starts to draw out of the local market, goods and  
9 services, and I'm thinking primarily of transportation services,  
10 then that can conceivably create a demand pressure that just  
11 raises the whole price and them's that got the money, namely  
12 Foothills, can pay it, and them's that don't, namely me and  
13 the other people that live here --

14                                  A           But, if prices would start  
15 to rise, we would see this in our bids which are compared  
16 with outside bidders as well, that if our purchases here were  
17 of sufficient volume to raise prices, then our next purchases  
18 here because the prices here are higher now, our next purchases  
19 are likely to go Outside.

20                                  Q           Yes, but you're assuming that  
21 the price to Foothills, if the bidding is the only mechanism  
22 by which you intend to monitor, that assumes that the price  
23 to Foothills is going to be the same as the price to me.

24   Now, is that a good assumption? I'm  
25 no economist, maybe some of you are, it just seems to me that  
26 that might not be a good assumption.



Littledale, Saker, Ellwood, Burrell,  
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1 MR. MILLER: Mr. Horton, maybe I can  
2 and answer that. It strikes me that nobody can control the  
3 prices the people are charging. For example what you pay as  
4 an individual and what I pay as an individual is entirely up  
5 to our bargaining ability.

6 Now, there's no question in my mind  
7 today that there are different prices for different people in  
8 the Yukon right now.

9 Q That's right, yes.

10 A And that isn't going to  
11 change because of the pipeline project. That is going to  
12 continue. There will be different prices for different  
13 people.

14 Q Okay, well, let's take a  
15 basic commodity. Food. Now there is an existing capacity  
16 in the Yukon right now to service the existing Yukon market,  
17 is that correct?

18 A That's right.  
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Littledale, Saker, Ellwood, Burrell,  
Miller  
Cr Ex by Horton

1 Q Now, there may indeed be an  
2 excess capacity in the sense that even without putting any  
3 pressure on prices, that there's the excess of capacity to  
4 service existing demand?

5 A That's correct.

6 Q Well, if Foothills, or any  
7 other major industrial consumer comes in, to feed 2,300 men,  
8 that is going to be a very quick injection of a massive new  
9 demand. That's 10 per cent of the existing population of the  
10 Yukon.

11 A I submit to you, though, sir,  
12 that there are 2,300 additional people in the Yukon now being  
13 fed for 120 days each year. I don't see --

14 Q During what part of the year?

15 A From May until September.

16 Q Mr. Burrell, when is the  
17 construction peak going to occur?

18 MR. BURRELL: The summer of '80.

19 MR. SAKER: The summer of '80 is

20 when they anticipate the very maximum amount and I might add

21 too that if we had 2,300 people, the feeding of them will be

22 sub-contracted out to a caterer, and if a caterer can't get

23 reasonable price for his supplies, he'd be bringing them in

24 himself from the South, and this is often done by our catering

25 people. And I say our catering people in all likelihood

26 the major contractor will again be sub-contracting the catering





1 out to whoever is the most competitive. And he is surely not  
2 going to pay a higher price up here if he can bring food,  
3 particularly from Vancouver or Edmonton himself, and he will.

4 Q As Mr. Miller has already said,  
5 different people pay different prices, and what I'm concerned  
6 about, and I imagine what a lot of other people are concerned  
7 about is how Foothills, as it seems to have stated that it  
8 intends to do, is going to avoid people like me who don't have  
9 the bargaining power, having to pay higher prices, because  
10 the people who presently, the businesses in the Yukon who  
11 presently supply me, choose to supply at lower unit price,  
12 Foothills, and still make good money doing it, because of the  
13 volumes involved.

14 MR. ELLWOOD: Mr. Horton, it strikes  
15 me as somewhat unreasonable to think that a businessman here  
16 would take a loss on supplying a pipeline contract and try to  
17 make up his losses by overcharging you.

18 Q No, I'm not -- I agree.

19 A If we were able to obtain a  
20 good price for food here, if the businessman here is able to  
21 supply us at a competitive price, then he should be able to  
22 supply you at the same.

23 MR. BURRELL: I think you have to  
24 add one other thing to this too, is that as you increase on  
25 the other side of the coin, as you increase the volume of  
26 materials that are moving in to a market area, generally the



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1 transportation costs go down and so on from that standpoint,  
2 the higher volume could in fact result in a lower cost to  
3 the communities. Now, as far as shortages of supply are  
4 concerned, and so on, I think that certainly through our  
5 bidders list, which we will put into place before the  
6 construction starts, that'll take into consideration the  
7 capability of the contractor or the supplier given his other  
8 commitments, which are commitments to the community, and the  
9 fact that we're, we'll provide as much lead time as we  
10 possibly can, which will enable the contractor to, or the  
11 supplier to gear up to provide our requirements and also to meet  
12 the requirements of the local people. On the other hand, we're  
13 prepared to size our contracts in such a manner that the  
14 contractor is able to handle them. I use the example, and  
15 I've used it many times, that say we require 40 houses, and  
16 we go to the local contractors and ask for them to quote on  
17 the construction of 40 houses and they say they are unable to  
18 do so, then we're prepared then to find out what they are  
19 capable of doing, given their other commitments, and award  
20 contracts accordingly. So, it may turn out to be three houses  
21 in one case, or two, or one, or five, or whatever.

22 The other thing too, is that I'm  
23 sure that if we were to order from local material, or local  
24 suppliers, we would be ordering in bulk, we would not be buying  
25 materials off the shelf, and we have to look upon the southern  
26 Canada as being able to supply the Yukon market as it exists,





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1 and also our requirement. As I said, we'll be ordering  
2 in bulk quantities, and really what happens in cases like  
3 that is that you buy from the local merchant a truck load of  
4 material which doesn't come through his store at all. It  
5 just gets put on in the warehouse in Edmonton or Vancouver and  
6 drives right by his store to the camp, and it's deemed to have  
7 been bought from him, but never really, in fact, affects his  
8 supplies on the shelf at all. So, it seems that we're not  
9 saying there won't be some difficulties, but certainly I  
10 think the reality of the situation and steps that we are  
11 prepared to take would certainly tend to minimize that.

12 MR. LITTLEDALF: Mr. Horton, just  
13 further to what Mr. Burrell said, to my knowledge where  
14 similar such projects have been undertaken, prices do not  
15 appear to have gone up, but have in fact gone down, and I'm  
16 sort of just wondering with this concern about these prices,  
17 and looking at Canada and the Canadian experience, I'm just  
18 wondering where there has been this kind of a situation, if  
19 there has, within the areas that we're talking of, I'm certainly  
20 not familiar with it, and I've been around Western Canada for  
21 over 25 years.

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Q Is Fairbanks an example of  
that?

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A I qualify it to say  
Canadian --

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Q Canadian only?

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A Yes. You know, we can talk  
about Fairbanks or Timbuktú, I'm merely saying that we live  
in Canada, and I think that we have to look at the Canadian  
experience, of which we have considerable --

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Q Okay, am I correct, Mr. Burrell  
in, as a result of these questions and answers and thinking  
that it's only through the competitive bidding process that  
you, at the present time, intend, in effect, to implement the  
policy decision that you intend to obtain the supplies and  
service from local business providing it does not cause  
unreasonable hardship?

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MR. BURRELL: No, I think it goes  
beyond that. But I think the bidders list is the foundation  
of it all, and then our policies with respect to lead times  
which I think are very important, I think many times you  
find that the problems occur because of short notice for  
demand. The lead time is important and the sizing of the  
contracts to meet the individual contractor's ability to  
construction. The other thing is just the size of the  
requirements we have.



1                   Let's take food as an example, as I  
2 have said before, we won't be buying, you know, by the box.  
3 We'll be buying it by the truckload basically, and the logical  
4 thing to do, and the thing that would be done is to, as I  
5 said put it on a truck in Edmonton and take it to the campsite  
6 and the grocer never does see it, but he does, it is, if it is  
7 in fact bought from him, that it's deemed that he has sold it.

8 His store really hasn't seen it and  
9 hasn't increased the number of people on his staff.

10 Q Mr. Littledale, I'll address  
11 my next question to you. It arises out of Mr. Burrell's  
12 written evidence, but still I would like to address it to you.  
13 Page 13, question 22 of his written evidence.

14 MR. LITTLEDALE: Yes, sir.

15 Q I would simply like clarifi-  
16 cation on, because it seems to me that possibly there might  
17 be some degree of inconsistency between his answer to  
18 question 22 and what I believe was your suggestion in  
19 evidence the first day related to who it is that's going to  
20 be providing the maintenance on the line.

21 A There is no inconsistency  
22 at all, Mr. Horton.

23 Q Okay, then can you just  
24 clarify it.

25 A I can elaborate.

26 In the pipeline end of it, what I said





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1 was that we would have specialized maintenance crews that  
2 would be trained to maintain the right-of-way.

3 Q Yes.

4 A Okay.

5 Q Yes.

6 A Now, the question came up,  
7 do you plan to contract any of this maintenance work, and I  
8 believe it was Mr. Goudge and I were having this discussion  
9 and he said 'well, you know, what you're talking about is  
10 ad hoc contracting'. Okay, I don't know, you know, you can  
11 use terms and 'ad hoc' and I said 'yes, ad hoc contracting'.

12 Now, you see, being responsible for  
13 the integrity of the line, we would not put out a contract  
14 on say, right-of-way maintenance, and just turn the whole thing  
15 over to a contractor and say okay, Joe Blow Construction Co.  
16 you've got a contract to maintain the right-of-way for fifty  
17 miles along here, now you look after that all summer.

18 What we would do, is we would put our  
19 own crews on there, and we might augment them, or ad hoc  
20 contracting, by Joe Blow Construction Company's equipment  
21 working there, under the direct supervision and control of  
22 our own people. This is primarily because we do not want  
23 to turn over anything like this type of contracting to a  
24 contractor where we do not maintain absolute control of what  
25 that equipment is doing, because you are working over a  
26 high pressure pipeline. You do have a responsibility when I



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1 say you do, we do, as Foothills, for the security of the line.  
2 Now things like painting, say painting of above ground  
3 apertinences, housing, stations, and so on, all that we would  
4 certainly contract out. It would not, apart from sort of  
5 trying to promote local business, it would just not pay us to  
6 sort of have painting crews on and things like this. It's  
7 just not a worthwhile endeavour on our part to man-up for  
8 this kind of operation.

9 Where we can contract out the work,  
10 without affecting, or in any way, sort of, endangering the  
11 security of the system, we will probably do it. It is to our  
12 benefit to do it. It's to everybody's benefit to do it, as a  
13 matter of fact, because we have found usually, and I go by  
14 our present experience, that it is more economical in a lot  
15 of instances to contract work out than do it ourselves. We  
16 can do it cheaper through contracts than do it ourselves.

17 We do want to maintain a nucleus or  
18 regular staff of trained people to make sure that we provide  
19 continuity of service and the integrity of the system is  
20 maintained and it's a safe operation.

21 Q Okay, thanks for that  
22 clarification, Mr. Littledale.

23 Later on in the -- Mr. Burrell, I'll  
24 come back to you now. Later on in your answer to question 22  
25 on page 15, you say Foothills will certainly co-operate to  
26 make this possible, however, caution will need to be exercised



1 so as not to stimulate the formation of a new business which  
2 could not be sustained following the completion of the pipeline  
3 construction phase.

4 I'm just wondering whether Foothills  
5 is willing, or intends to carry this caution to the extent of  
6 if necessary, paying a higher price to have provided by a  
7 business.

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1 operating out of down south  
2 what some new business or expanded business in the Yukon might  
3 be willing to provide would not then be able to sustain after  
4 the construction phase.

5 A you're saying, are we  
6 prepared to support a business that won't be self-sustaining  
7 following the construction of the pipeline and then could be  
8 in jeopardy financially because they didn't have enough  
9 opportunity in the business in the construction phase to right-  
10 off their equipemnt, say, is that what you're --

11 Q No. Your whole answer --

12 A The intent of that is to  
13 say that, and we say caution has to be exercised, is that  
14 certainly, as an example, we have a requirement to haul gravel  
15 and it just wouldn't proper, say, for a contractor to go out  
16 and acquire 100 trucks to haul gravel for a short periof of  
17 time, <sup>then</sup> after the gravel is hauled on a project have nothing  
18 to do with, in fact, suffer financially rather than to make  
19 some profit as a result of the work that he's done. Now --

20 Q Right. It wouldn't be  
21 practical for him and, no, when I asked you the first question  
22 I was not asking you, would Foothills support these guys after  
23 the construction phase was over. But just take the gravel  
24 truck. Let's assume somebody is willing to do that, and by  
25 doing it, for his own stupidity, is willing to do that, and  
26 if he does do it, Foothills can get that portion of the work



1 it needs done at a lower price, then it would have to pay if  
2 it uses a trucking company down south. The question I asked  
3 really is, are you willing to, in effect, police the Yukoner's  
4 stupidity by paying a higher price to get somebody down south  
5 who has the long-term capacity to send these 100 trucks up  
6 here, and then have something else to do with them after he's  
7 done with them up here.

8 MR. LITTLEDALE: Mr. Horton, perhaps  
9 if I may just interrupt here. It has been our policy, and I  
10 believe Alberta Gas Trunk Line's policy, as the two owner  
11 companies, to make every effort to see that a contractor does  
12 not go broke. Now by this, I do not mean to say that we are  
13 saying that we are going to make everybody rich in the Yukon,  
14 that is, nothing could be further from the truth. That is not  
15 the policy. The policy is, that if a contractor is in trouble  
16 we usually have been able to sit down with him, work it out,  
17 and at least make sure that he hasn't gone broke. And this  
18 not only extended to the type of situation that you have  
19 talked about, and I have been involved in many contracts  
20 because I am in charge, as one of my responsibilities, in  
21 charge of construction for Westcoast Transmission, where a  
22 small contractor, even to the extent that he has underbid the  
23 job, and he has got into trouble, and he has come in and we  
24 have talked it over, we have paid beyond his bid price, and  
25 made a financial adjustment with him to make sure that he  
26 hasn't gone belly-up on our account. And one of the reasons



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1 for this is not because we want to put ourselves forward as  
2 you know a bunch of good guys, there's a good reason for doing  
3 this. It is that we need the business people, we need the  
4 contractors, and everybody can make an error in judgment  
5 in business. Sometimes when they make an honest error in  
6 judgment in business, such as if a man comes along and gives  
7 you a quotation on a job, and you accept his quotation, you  
8 might recognize as being obviously too low, that he couldn't  
9 really do the job for that amount, but he goes ahead and  
10 does it anyway. Now by the time he's finished the job, and  
11 he bid, for an example, \$80,000.00 to build you a couple of  
12 houses, and actually, to be honest, he should have given you  
13 a bid of \$100,000.00, and you've got \$100,00.00 worth of  
14 buildings sitting there, 2 buildings, each \$50,000.00, then  
15 you come to some settlement, and you say, okay, fine, you  
16 know, we come to some adjustment, and you negotiate an extra  
17 for that additional monies, and saw it off that way.

18 . MR. BURRELL: I might also add to  
19 that, is that in some contracts that I've been involved with,  
20 and it's apparent that the bidder is considerably lower than  
21 the others, I've done it, and I know that others have too,  
22 have suggested to the bidder that perhaps he should check his  
23 arithmetic or whatever, and he understands what that means,  
24 and it sometimes results in him coming back saying, fine, or  
25 it's too low or withdrawing his bid even. But, that's a  
26 practice that's followed quite commonly.





1 Q Okay. Mr. Burrell, I  
2 turn now to page 16 of your testimony, question 27, your  
3 answer sub-paragraph (a).

4 "In order to avoid unnecessary duplication on competi-  
5 tion for the local worker, the system should be  
6 designed to deliver Yukon manpower to the total  
7 project."

8 Could you tell me sir, what, if any steps, Foothills proposes  
9 to take, intends to take, to first of all, ascertain when  
10 it is placing itself into competition, into a competition  
11 for existing local labor, competition with existing sources  
12 of employment and what steps Foothills intends to take to  
13 avoid placing itself in competition with already existing  
14 business enterprise.

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Miller  
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1                                   A           The intent there was to say  
2 let's have a single system so that we don't have two or three  
3 different arrangements vying for the same personnel. In other  
4 words, if there's a requirement by ourselves for some local  
5 workers and related activities, such as sub-contractors that  
6 are working on our project, have requirements, then let's  
7 clear that through a central area so that it's more efficiently  
8 handled.

9                                   Now, as far as working toward a  
10 single organization,           the system referred to is a  
11 Manpower delivery system, we have had very preliminary  
12 discussions with Canada Manpower and a representative of the  
13 YTG towards the need for developing this manpower delivery  
14 system, and it's been recognized by them, as ourselves, that  
15 it is required, and the preliminaries toward developing that  
16 are just getting going and there were to be some meetings  
17 scheduled with union and contractor representatives to  
18 advance this further. Unfortunately because of matters  
19 pressing between the unions and the contractors on labour  
20 negotiations, we haven't had an opportunity to have that  
21 meeting. But certainly it's recognized and that there are  
22 preliminary steps under way now to develop such a system.

23                                   O           If it should come to pass  
24 that it became apparent that Foothills was in fact drawing  
25 not from existing unemployed in the Yukon, but drawing  
26 employees away from other industrial, commercial, what have you,



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1 sources of employment in the Yukon, I'm thinking particularly  
2 during the construction phase, would Foothills then at that  
3 point sort of close the door to Yukoners taking employment  
4 with Foothills, as --

5 A I don't see how we could.

6 If someone came to us requiring,  
7 or seeking a job, and we had a position, I don't see how we  
8 would be in a position to deny it to him. It's really a free  
9 country and it's no different than the situation we're in  
10 now, where say either you or I are looking at changing our  
11 occupation. We go to another potential employer and discuss  
12 it with him, and if he has a position that we feel is to our  
13 advantage, we take it. If we feel it's not to our advantage,  
14 then we don't.

15 I think it's a matter that we  
16 couldn't -- if a person wanted a job and we had the position,  
17 I don't see how we could deny it to him.

18 Q Mr. Burrell, maybe I'm  
19 wrong in coming to this conclusion, but from that answer I  
20 come to the conclusion that in fact Foothills would be willing  
21 if it got to the point of competition, to compete with  
22 existing employment sources.

23 MR. ELLWOOD: I think what we're  
24 driving at here, Mr. Horton is -- I may relate that to  
25 a situation which I understand now exists in the Yukon,  
26 there appears to be here a very tight supply, if you wish, of





1 heavy duty mechanics, at this time. What we're looking at  
2 here in avoiding competition, is not so much to refuse a  
3 Yukoner who is now a heavy duty mechanic, a job, but to make  
4 extra effort to recruit Outside for our requirements.

5 We are aware, of course, whenever we  
6 start getting into competition for labour, it affects us as  
7 well as others. We are part of that competition, so it's  
8 immediately drawn to our attention that whatever, heavy duty  
9 mechanics, are in short supply and we are there prepared to  
10 make an extra effort to bring our people in from Outside.

11 Q Okay, Mr. Burrell, I think  
12 that is pretty well the end of the questions, for the time  
13 being, that I had intended to direct specifically to you,  
14 or at least figured that you'd probably want to answer.

15 I now turn to you, Mr. Ellwood.

16 MR. CHAIRMAN: Mr. Horton, could  
17 I interject and ask if you're close to the end of your line  
18 of questioning, if not, perhaps this would be an  
19 appropriate time to take a break.

20 MR. HORTON: I think I've got about  
21 another half hour, but I'll get together with Mr. Goudge  
22 over the break and we might be able to streamline it.

23 MR. CHAIRMAN: All right. I would  
24 propose that we now take our morning break.

25 PROCEEDINGS ADJOURNED

26



MR. GOUDGE: Sir, if you're ready, perhaps we could reconvene.

That has to do with the relevance of the Alaskan situation, and the comparability or otherwise of the situation with the Alaskan communities and those in the Yukon, and the relative comparability with respect to southern Canada. I simply want to say that the Board is interested in hearing submissions on that subject,

degree of comparability, the similarities and differences, with respect to both southern Canada and Alaska, and the same on that subject. I'm going to ask Mr. Goudge to canvass informally with Counsel for the proponent and Counsel for the intervenors, the matter of what information we can expect to get in these hearings with respect to the Alaskan situation and in the light of that information in his report to the Board. The Board will consider what additional steps, if any, is necessary for us to consider to supplement that information.

So, with that comment, Mr. Horton,

I ask you to proceed.

MR. HORTON: Thank you, Mr. Chairman.

Mr. Ellwood, the next few questions



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1 are -- I'll direct them to you, but I do so only because I  
2 suspect you're likely the one who would be answering them.  
3 Pass them on to somebody else if you like.

4 I refer to the first page, question  
5 3 of your testimony given yesterday. I'm wondering who the  
6 intended air carrier is to transport your construction  
7 workers in and out?

8 MR. ELLWOOD: We haven't selected  
9 an air carrier yet.

10 Commercial flights, of course, coming  
11 in from the South, that would be CP Air, as far as charters  
12 go, we haven't selected anybody.

13 Q Okay, is the intention to  
14 use charters or commercial flights?

15 A We haven't made any decision  
16 on that.

17 Q So, at this point in time,  
18 it's impossible for any determination to be made by anybody  
19 about the extent to which the Foothills' employee and sub-  
20 contractor employee movement in and out is going to put  
21 pressure on existing air carrier --

22 A I'm sure, Mr. Horton, that  
23 when the time comes for us to make a decision on this matter,  
24 CP Air will no doubt be interested, being the carrier serving  
25 this part of the country. If we're satisfied that they can  
26 supply our requirements, I'm sure we would receive some bid





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1 from them to do that.

2 Q Yes. Well, I'm not trying  
3 to find out who it is that's going to get the contract. I  
4 really am wondering primarily whether it's going to be through  
5 scheduled flights, the regularly commercial scheduled flights,  
6 or through charters, and also to what extent, if any, pressure  
7 is going to be put on the existing seats available on the  
8 commercial flights that are used right now by other people?

9 MR. LITTLEDALE: Mr. Horton, several  
10 months ago, I was approached in Fort Nelson by CPA Base Manager  
11 who said that CP was very interested in what was going on.  
12 The potential, or increased business, and could I give him  
13 some more information.

14 I gave him what I could, and I did  
15 turn him over to our Calgary office, and I know CP in house  
16 have been doing a lot of looking and thinking about the  
17 situation as to what additional seats that they would have  
18 to provide to accommodate this.

19 Q What about transport within  
20 the Yukon? These workers are going to be landed at airports  
21 and they are then going to be transported to the construction  
22 sites. How is that going to be accomplished?

23

24

25

26



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1 MR. ELLWOOD: By bus, I would  
2 expect.

3 Q Do you have any idea of the  
4 amount of traffic that is going to be generated by reason of  
5 that alone? The transport of workers along the Highway  
6 coming in, going out, coming in, going out?

7 A I don't have any estimates  
8 of traffic along the Highway generated by that.

9 Q This was not part of the  
10 Trimac Study was it?

11 A No, theirs is materials  
12 movement.

13 Q Materials movement only?

14 A Yes. I suppose those  
15 numbers could be generated relatively simply. If you look  
16 at our manpower requirements, you can see when the personnel  
17 are moving in and out by the rising and falling of manpower  
18 by simply a case of dividing the number of seats on the bus.

19 Q Now, question 3, the third  
20 part of your answer refers to the self-contained camps. I'm  
21 wondering what's going to happen with these camp sites when  
22 the construction is over?

23 A I expect they'll be trucked  
24 back to Alberta for re-use on other projects, or back to  
25 B. C., depending on where they come from.

26 Q The buildings that are on



2 A Yes.

5 A The land --

8 A The sites will be cleaned  
9 up and the above-ground fixtures that are necessary, anything  
0 that would be built there, would be removed and the sites  
1 cleaned up and I would think depending on the location, b  
2 revegetated.

Some sites are located in, a very small campsite will be put up in a borrow area for casting concrete weights and that sort of thing, and then you wouldn't revegetate, because the borrower is still active, but --

17 Q Well, there will be a road  
18 access . . obviously I guess, there will be road accesses  
19 from the Highway into these construction sites?

20 A Yes, yes.

21 Q Are all of these construction  
22 camps going to be reasonably close to the Highway?

23 A Yes. Yes, they're all  
24 along the alignment, which is reasonably close to the Highway.

25	0	Okay.
----	---	-------

26 Has Foothills made any examination





1 into, or does Foothills have any proposals for alternative  
2 uses that could be made of the camp sites after Foothills is  
3 all through with them, and has cleaned them up?

4 A Not to my knowledge. I  
5 would have to check that with Mr. Bouckhout, our environmental  
6 manager, who may have some thoughts on this, with respect to  
7 recreation and aesthetic considerations in locating them and  
8 so on, but not to my knowledge.

9 Q Is Foothills going to have any  
10 continuing need for these camp sites after the construction  
11 phase is over?

12 A No, none whatsoever.

13 Q So, you're not going to be  
14 trying to acquire title to the land or, you're just going to  
15 want the use of the land while construction is on and then  
16 be leaving it?

17 A Yes.

18 Q I guess over on the second  
19 page of your testimony, casual transportation will not be  
20 made available to any of the construction workers for any  
21 purpose, and in addition parking space will be limited. I  
22 assume that you're saying that casual transportation using  
23 Foothills or Foothills sub-contractor's vehicles is not going  
24 to be made available?

25 A Yes.

26 Q They're not going to be able



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1 to use the Company car to toodle about as they choose?

2 A Right.

3 Q On the basis of Foothills and  
4 it's parent company experience with other pipeline construction  
5 projects, are you able to make any estimate of the amount of  
6 casual traffic that, in fact, results from a 700 or 800 man  
7 construction site, construction camp. I mean, surely these  
8 guys do not all spend their entire life up here at the  
9 construction camp and the construction site.

10 A Well, my experience with  
11 camp operations in Alberta -- I've never been involved with  
12 living in a camp that large.

13 As I recall now, thinking of a  
14 particular camp location that we had south and a little west  
15 of Rocky Mountain House on one project, the amount of  
16 casual transportation really was limited almost entirely to  
17 the residents of the area who were working on the project,  
18 and of course, went home every night, rather than stay in  
19 the camp. We did have several visitors out to the camp, and  
20 in that situation the crew simply came mostly from Red Deer  
21 and Edmonton and drove home on weekends, so there was  
22 transportation in on Monday morning and out on Friday evening  
23 or Saturday evening. We worked five and six day weeks on  
24 that project.

25

26



1 Q Has Foothills made any  
2 attempt to try to come up some some sort of reasonable  
3 statistical study of the amount of traffic, casual, traffic  
4 that is going to be generated simply by virtue of the pre-  
5 sence of these men at the construction camps, and the re-  
6 creational activities they might wish to pursue off the  
7 cosntruction camp sites?

8 A I would think that in a  
9 situation like we're proposing here, if local people are  
10 employed on the project which I would expect, that there will  
11 be some traffic back and forth from the town as these people  
12 invite friends that they've made --

13 Q Mr. Ellwood, I'm not  
14 asking you to sort of speculate on the amount,  
15 I'm just wondering if there is an existing study that has  
16 been done by Foothills, that would provide some reasonable  
17 estimate. It's really simply a question of yes or no, either  
18 there is or there isn't.

19 A There's no study, but I  
20 would like to add to that by saying that I don't think that  
21 you could make make sort of a reasonable estimate of that.  
22 These people are flying in from the south being bussed out  
23 to the camp, of course, don't have transportation. I think  
24 one can fairly assume then, they will not be, since they  
25 haven't brought their cars, they will not be driving into  
26 town.



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1 Q Okay. Now I want to  
2 move on to, oh, I guess it's just sort of sub-paragraph 5 of  
3 your answered question 3. Has Foothills done any study with  
4 the purpose of trying to provide some statistical prediction  
5 of the demand that is going to be placed on Yukon Health Care,  
6 health services facilities by the employees of Foothills  
7 or its sub-contractors? And again, I'm thinking particularly  
8 of the construction phase.

9 A Yes, we have. For the  
10 construction phase, you'll find those, that data in our  
11 Socio-Economic Statement volume 5.A. We have there deve-  
12 loped, based on past experience, an accident rates for the  
13 pipeline industry, in accidents per million-man-hours, and  
14 converted that to what we would anticipate up here, given the  
15 man-hours to be worked on this project.

16 Q Is that restricted just  
17 to accidents, accident rates? That study?

18 A Yes, that's the demand  
19 we would place on the facilities here, things like, you know,  
20 workers that have colds, and so on. This is treated in the  
21 camp.

22 Q So the actual statistical  
23 study is related to the accidents, the demands resulting from  
24 accidents only.

25 A Yes.

26 Q Not from naturally occurring





1 illness, which may be colds, or heart attacks or whatever.

2 A Right.

3 Q I think it's the third  
4 page. Questions 6 and 7, anyway. The compensation policy  
5 to cover accidental damage. Perhaps, your counsel would  
6 prefer to answer this question. My question is simply this:  
7 Is that policy, the applicability of that policy restricted  
8 only to actionable, court actionable injuries, loss, damage  
9 done? Maybe if I could direct the question to counsel for  
10 Foothills.

11 A I could say that Mr.  
12 Blair will be prepared to speak to this when he appears  
13 later in the Inquiry, as our policy witness.

14 MR. BURRELL: Mr. Littledale has  
15 had experience with respect to such matters in years with  
16 Westcoast and others, and perhaps he might want to say about  
17 Westcoast, what Westcoast does, but certainly, as Mr. Ellwood  
18 said, Mr. Blair is prepared to go into this matter more  
19 fully, when he appears as the policy witness for this  
20 Company.

21 Q Maybe I'll rephrase the  
22 question a little bit just to make sure that it's understood.  
23 I'm wondering whether the policy applies only to the types  
24 of loss or damage caused, which Foothills feels would  
25 probably give rise to a successful court suit?

26



1 MR. LITTLEDALE: Mr. Horton, when  
2 you're talking about this, are you talking about such things  
3 as running over somebody's traps, this kind of thing?



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Q That and traffic on highway accidents, you know, any of the loses.

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A Well, when it comes into, you know, I don't think you can be quite that broad and I would defer to my counsel to say that there is quite a difference, say, between running over somebody's outboard motor that happened to be by, hidden in the bushes that he used and a traffic accident, because a traffic accident usually immediately involves the local authorities and the police particularly if it's a serious accident. Nowadays, you know, there's usually limits in the provinces of, say, \$200.00 worth of body damage and you have to get the police involved, this kind of thing. I'm not sure that we can sort of get into an all-encompassing thing here but we can perhaps segregate them and a traffic accident, the police would be involved.

If you're talking about such things as, say, damage to a person's land or property or things like that, the policy has been of Westcoast and, again, I say, I believe AGTL, because most of these companies, whether it be AGTL, Westcoast, Interprovincial Pipe Line, Trans Canada, they're all very similiar. All of these companies are very similiar in their policies and the policy there is, that the person, the individual that has suffered the lose goes in and reports it. Now, if it's known and the fellow





1 knows that he's done some damage, say the equipment operator  
2 or something, then he would, in all probabilities, report it  
3 to the supervisor, the supervisor would go and see the per-  
4 son involved. Then we would send our Claims man up to talk  
5 to him and we would sit and try to come up with a reasonable  
6 number in dollars to compensate him for his loss or damage  
7 to his property or his articles, whatever they may be.

8 We prefer to settle these things on  
9 a, such a basis and we certainly, have not made it a practice,  
10 to drag everybody into court that has a claim. In fact, I  
11 don't know that there's ever been that kind of a problem,  
12 where, in the context that I am now talking of, that we have,  
13 sort of, looked at in the light that you mentioned.

14 Q Is the policy restricted to  
15 settling only those claims, if they did go to court, might  
16 well result in a court award awarded damages?

17 A Oh, no, absolutely not. The  
18 way it's gone, usually, Mr. Horton, is I think like most  
19 corporations, responsible corporations and there are many  
20 of them, you certainly try to give the individual the benefit  
21 of the doubt. Now, once in awhile, you can run across the  
22 odd person that is unreasonable, but, in most cases, you do  
23 try to give the person the benefit of the doubt and say, I  
24 can't prove it and you can't prove it, but, okay, it is with-  
25 in the realms of probability what you say is true here, that  
26 because we damaged this, that or the other, you have suffered



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1 this kind of dollar loss, though we can't see it now, however,  
2 okay, we'll settle and forget it.

3 Q Now, on the last page of your  
4 testimony, Mr. Ellwood, question 8 and the answer related to  
5 housing supply. I wonder if you could briefly outline the  
6 criteria that Foothills' uses to determine where it would be  
7 necessary to construct company housing, for the company itself  
8 to construct company housing, and where the real estate market  
9 already has sufficient housing available.

10 A What criteria?

11 Q Yes, what criteria did you --  
12 you stated the conclusions for example, that the housing  
13 market in Whitehorse appears to have more sufficient capacity  
14 to meet our needs at this time and you've also stated a  
15 conclusion, in respect to the housing supply at Beaver Creek,  
16 Haines Junction, Teslin and Watson Lake. I'm wondering what  
17 criteria, what facts, what criteria you looked at to come  
18 to those conclusions?

19 MR. ELLWOOD: We have just looked  
20 briefly at the housing here, the number of units available,  
21 houses and apartments. There are some data in Mr. Miller's  
22 evidence respecting apartment vacancy rate here and the num-  
23 ber of units that are available and that's the criteria that  
24 we use.

25 Q So you looked only at the num-  
26 ber of units actually available?



9 They would like to sell some.

16 A Well, the discussions that  
17 I have had, there is always an excess of housing here. Some-  
18 times you have quite an excess and sometimes very little, so  
19 that, at the moment as I said in my evidence, it would appear  
20 if we were starting our operations in the next few months,  
21 we would not contemplate building company housing here, because  
22 there is more than sufficient <sup>number of</sup> housing units on the market to  
23 house our employees.

26 | O So then am I reasonable in



1 inferring from what you've said that Foothills does not  
2 anticipate, that Foothills generated demand for housing  
3 will cause an excess of demand over existing supply, an  
4 excess of demand over demand that would exist even without  
5 Foothills.

6 A No, we don't anticipate --

7 Q And cause inflationary  
8 prices, inflationary pressure on house prices?

9 A We don't anticipate that  
10 at all. The pressure is in the other direction right now.  
11 If the situation does start to turn around, and demand does  
12 increase here for some other reason, prior to our moving  
13 into the area, we'll just have note of that as it occurs.

14 Q Okay, in the event that  
15 it does become apparent that Foothills generated demands for  
16 housing, particularly, well whether it be for construction  
17 phase or the operation and maintenance stage, would in effect  
18 be causing an inflationary pressure. Would Foothills then  
19 at that point build company houses, rather than rely on the  
20 private market to supply the housing need?

21 A If there were no housing  
22 available in Whitehorse, or insufficient housing available  
23 in Whitehorse to fill our needs, we would undertake to build  
24 housing here. Or to arrange to have it built.

25 Q Okay, now I think I'm  
26 through with questions that I thought should be directly





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1 directed to you, Mr. Ellwood, and Mr. Burrell, you seem in  
2 the past to have sort of been the Chairman of the panel, and  
3 maybe now I'll simply just start directing the balance of  
4 my questions, if not directly to Mr. Miller, then to you,  
5 and you can pass them on to whoever.

6 I would like to start first of all  
7 with the whole area of the demands that would be placed on  
8 Highway traffic. The volume of traffic coming up and down  
9 the Highway.

10 MR. BURRELL: As it relates to  
11 project, I believe Mr. Ellwood has some, would be able to  
12 comment on that.

13 Q Is the pipe, I guess that  
14 is obvious, the pipe is going to be carried for at least  
15 some portion along the highway, it's going to be trucked along  
16 the Highway --

17 MR. ELLWOOD: Yes, pipe will be  
18 coming into Yukon from up the Alaska Highway from the rail  
19 head at Fort Nelson, and also on the Haines Road, and then  
20 via the Alaska Highway, coming in from barge from Vancouver.

21 Q And this is what the Trimac  
22 Report relates to.

23 A Yes.

24 Q The services, materials only?

25 A Yes.

26 Q And the number of truck trips



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1 that would be necessary?

2 A Well, all the figures in the  
3 Trimac Report were expressed in tonnages over a given time  
4 period. They're not given in the number of trucks.

5 Q Are there any figures on  
6 the number of trucks that would be available?

7 A Well, I've done some  
8 calculations for a few points along the Highway, just as  
9 a representative sample of what one could expect at the  
10 various stockpile locations. Those are in very rough  
11 form, I just have them as pencil notes.

12 Q This is the number of  
13 vehicles --

14 A Yes, all I've done

15 Q -- your figures are taken  
16 on the number of vehicles that are going to have to --

17 A Yes, for example, I've taken  
18 the pipe tonnage and each truck here can carry three lengths  
19 of this pipe, the average 67 and 1/2 feet, that's 27.7 tons  
20 divide that into the tonnage required over the period and  
21 you get the number of truck trips.

22 Q Has any study been done of  
23 the existing volume of traffic along the Alaska Highway? Has  
24 that been done by yourselves?

25

26



1 A Not by ourselves, we have used  
2 the data base.

3 Q Okay, how much of an increase,  
4 how much of a percentage increase is all of your traffic,  
5 whether it be to the, whether it be for the purpose of bring-  
6 ing your pipe in and transporting it about or whether it be  
7 for the purpose of transporting about the other materials  
8 you're going to be using. How much additional vehicular  
9 traffic is going to be generated up and down the highway?

10 A Well, this is really, it's  
11 very difficult to estimate the amount of local traffic,  
12 that you might have in one spot, during the construction  
13 activity, I can give you some numbers, perhaps, that would  
14 put it in order of magnitude for you. Just let me get the --

15 Have we got a route map so that I can  
16 relate pipeline mile posts - the highway mile posts, here?

17 Q Mr. Chairman, maybe, these  
18 figures are not calculated at this moment, eh?

19 A Well, yes, I have some figures  
20 right here. As I say, I've just got some pencilled notes in  
21 front of me.

22 Q Okay, so the figures have been  
23 calculated.

24 Mr. Chairman, maybe, I would be sat-  
25 isfied if, simply, they could be either filed with you in  
26 written form or typed up. I don't propose to kind of question





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1 the numbers that you've come up with, but I think that my  
2 main point is that the information be available for the  
3 inquiry and, rather than waste time having them read out,  
4 I'm willing to go on without that read out.

5 MR. CHAIRMAN: Could you undertake to  
6 do that, Mr. Ellwood?

7 A Yes, I'll have this typed up  
8 and as a representative, I've calculated this for three  
9 points along the highway to show basically what the traffic  
10 generated by the project would do here.

11 MR. HORTON: At which three points?

12 A Pipeline Milepost 162, 215 and  
13 320. Just north of Haines Junction, between Haines Junction  
14 and Whitehorse, and south of Whitehorse.

15 Q Now, you'll be utilizing both  
16 of the main highways, the highway from Haines up to Haines  
17 Junction, and also the Alaska Highway, will you?

18 A Yes.

19 Q Now, can you file figures  
20 which will differentiate between the two?

21 A They're in the Trimac Report.

22 Q I'm not interested in the  
23 tonnages that are going to be coming up, I'm interested in  
24 some figures about the numbers of vehicles that are going to  
25 be passing to and fro.

26 A Well, the material, as I've



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1 said, I've calculated these for three points along the high-  
2 way. Now, material coming up the Haines Road to Haines Junc-  
3 tion then goes north along the highway and south along the  
4 south, so I've calculated one point on each side of Haines  
5 Junction.

6 Material coming up from Fort Nelson,  
7 the bulk of it does not get beyond Whitehorse. There are  
8 some items that have to be trucked up from Calgary, all of  
9 the way up.

10 Q Are you able right now to  
11 state a percentage increase in the number of vehicles that  
12 your fellows are going to generate, over and above the  
13 existing number of vehicles that are going to be using these  
14 highways?

15 A You'll see in our application  
16 on Page 5(a)-5.38, a table that, entitled "Increase in High-  
17 way Traffic Through the Communities Resulting From Truck  
18 Trailer Movements of Supplies". Now that traffic, or that  
19 table lists communities and the percentage increase in traf-  
20 fic, attributable to our movement of supplies up and down the  
21 highway.

22 This, the numbers in there were cal-  
23 culated for our earlier 42 inch case, there needs to be some  
24 slight adjustment to them because of the 48 inch case, but  
25 in order of magnitude they are correct

26 Q And that's on the basis of the



1 number of vehicles, rather than on the tonnage?

2 A Yes.

3 Q Okay.

4 A The percentage increases in  
5 there vary from about 1.6 per cent, in the Whitehorse area,  
6 to 34 per cent on the Haines Road.

7 The reason for the large increase,  
8 the percentage increase on the Haines Road, of course, is  
9 because it's very minimal traffic on that highway at the  
10 present time.

11 Q Are there going to be any dis-  
12 ruptions of highway traffic as a result of actual construc-  
13 tion at, under or near, or over the highways, which, when  
14 the highway is getting in, getting to a highway crossing?

15 A Well, I suppose one could call  
16 it a disruption when we're boring road crossings. We gen-  
17 erally put out a sign that says "Slow, Men and Equipment  
18 Working". There's no need to stop the traffic, there's no  
19 disruption of that sort, but, when the men and equipment are  
20 working, just boring the road crossing, we would, of course,  
21 ask the, by signs, ask the traffic along the highway to drive  
22 with caution there.

23 Q But the road itself, the high-  
24 way itself, you say, would not be, have to be closed off?

25 A No.

26 Q When you're doing the road



1 crossing?

2 A No, the crossings are bored  
3 underneath the road, the road surface is not disturbed so  
4 there's no reason to shut off the traffic.

5 Q Okay. Mr. Miller, I believe  
6 that you stated somewhere in your study - right at the mom-  
7 ent I can't place my finger on the precise page, but I be-  
8 lieve that you stated somewhere in your report that there -  
9 oh, here it is, page 11. Are you suggesting that there is  
10 not going to be any measurable effects on highway maintenance  
11 costs in the Yukon, resulting from the Foothills' traffic?

12 MR. MILLER: That's correct, I'm  
13 suggesting that there will be <sup>no</sup> measurable effect on highway  
14 maintenance costs.

15 Q Now, in arriving at that con-  
16 clusion, did you take into account the engineering aspects  
17 of the road bed of the Haines Road and the Alaska Highway?

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7 Q Mr. Saker, you at one time,  
8 you at one time built highways, didn't you?

10 Q You've probably built some  
11 that I drove over in Saskatchewan.

13 Q They were well built.

18                     A               Well, volume doesn't hurt  
19 the road. It's just like how many people can walk over  
20 a sidewalk, will not deteriorate the sidewalk, it may be the  
21 weight of that one man, so the, primarily, the maximum amount  
22 of weight that you intend to allow on that highway --

26 A Generally, speaking, it does



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1 not. Where the conditions have more than the volume.

2 Q I see, well weight does,  
3 does it?

4 A Yes.

5 Q Okay, has Foothills done  
6 made any enquiries into the nature of the roadbed construction  
7 along the Alaska Highway and the Haines Highway?

8 A Trimac in their Logistics  
9 Reports to us made that investigation.

10 Q And you're still saying  
11 that there's not going to be any measurable increase in the  
12 maintenance costs as a result of the weights that are going  
13 to be going over the highway?

14 A I would only repeat what  
15 Mr. Miller said. We don't contemplate there being any.

16 MR. ELLWOOD: In the Logistics Plan,  
17 in developing a plan to move materials into Yukon, these  
18 factors were taken into account and the weights to be hauled  
19 on one trip were set according to the road bed, not the other  
20 way around.

21 Q I see, okay.

22 Now, there will have to be numerous  
23 road accesses to the pipeline to construction sites along  
24 the pipeline, and to the construction camps. That's right  
25 isn't it?

26 A Yes, that's



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1 correct.

2 Q Now, are all of those road  
3 accesses going to left after the construction phase is over,  
4 or are some of them going to be removed?

5 MR. SAKER: We've tried to locate  
6 our accesses where they'll be used by the compressor stations.  
7 Where this happens there will be a permanent road. Where it  
8 is only a temporary access to borrowers, or to the right-of-way,  
9 if required, it will be returned to it's natural state with  
10 everything but the trees.

11 Q Okay. It's probably a  
12 stupid question, but I'm just wondering if, after a pipeline  
13 is in the ground, there is any use that could be made of the  
14 surface without interfering with your own maintenance and  
15 inspection requirements for that pipeline.

16 A You mean, the right-of-way?

17 Q Yes. The right-of-way that  
18 the line is actually sitting under?

19 A Well, Mr. Littledale the  
20 Operation and Maintenance man and can remark on that.

21 MR. LITTLEDALE: Yes. Certainly  
22 right now, you can farm over it.

23 Q Can it be used for  
24 recreational purposes?

25 A Absolutely.

26 We have pipelines running 36-inch





1 lines running through people's front yards in the Fraser  
2 Valley, and not by design, we don't like to build this way,  
3 but due to in areas, especially in the lower mainland where  
4 you get a lot of congestion, and people have decided they  
5 want to build. But that's an extreme case. But certainly  
6 for recreation planning -- anything as long as you don't  
7 start driving spikes into the pipeline.

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1                                   Q           I'd like to now address  
2 the question to you, Mr. Burrell, and perhaps you pass it  
3 on to whoever, if you don't want to answer it yourself.  
4 Forest fire hazards, particularly during the construction  
5 project, there are going to be a lot of men and a lot of  
6 equipment moving around, and men and equipment sometimes  
7 cause fires. I'm wondering whether Foothills intends to  
8 at its own cost, be making available equipment for putting  
9 out fires, small bush fires that get started, before they  
10 too become forest fires?

11                                   MR. BURRELL:   That question is  
12 best addressed by Mr. Littledale.

13                                   MR. LITLEDALE:  Yes sir. Forestry  
14 do have a requirement, whether the Company wants to do it or  
15 not, and in our case we do, but they do have a requirement  
16 that you do have to carry a certain amount of firefighting  
17 equipment. And they list exactly, precisely, what that is.  
18 And you have to go out and buy it, then maintain it, and  
19 they come around from time to time and inspect it, and make  
20 sure that you do have it.

21                                   Q           So, you'll be looking after  
22 the immediate construction area. Now, I'm wondering, the  
23 construction camps, What, if anything, does Foothills propose  
24 to do, or feel it can do to control the problem of men going  
25 off, either on foot or however, into the wooded area, in the  
26 vicinity of the construction camp? It may be 2, 3, 4, 5,



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1 miles away from it, through their own carelessness, starting  
2 fires. Is there going to be any policing in effect done by  
3 Foothills against that type of activity, or as a protection  
4 against that type of activity?

5 A Well, it's really one of  
6 the, for that type of activity, and here you're talking about  
7 a couple of guys deciding one afternoon, wander a few hundred  
8 yards away from the camp and build a little fire somewhere.

9 Q Yes, something like that.

10 A Yes, the way that is  
11 policed, you know, there's sort of a constant reminder, and  
12 it's similar to the way that forestry police it, you  
13 know. At all camps, there will be a notice board which will  
14 run the same as forestry, you know, as to the hazards,  
15 medium, high hazard, low hazard, you know, and so on. And  
16 it will be scaled and it will be changed to tell the people  
17 in that area, both the people in the camp and the cons-  
18 truction crews that: look, today is a very hazard area, it's  
19 been dry for a week. Also within the camp there will be  
20 such things as notices, so people will be talked to and  
21 it will be part of their briefing.

22 Q So, you will be undertaking  
23 kind of a public education "Smokey the Bear" type program.

24 A Absolutely. Yes, you can,  
25 you know, fire itself can be very desruptive to you. And that  
26 perhaps what you've just mentioned, is a very good way of



1 putting it.

2 Q Will also be doing sur-  
3 veillance?

4 A Oh, yes.

5 Q Aircraft surveillance?

6 A Yes, we'll be doing  
7 continuous aircraft surveillance during the operation/  
8 maintenance phase, and there will also be some aircraft  
9 surveillance, there will be movement of small aircraft during  
10 the construction phase, probably at a greater frequency  
11 than during the O & M phase. You know, people flying from  
12 one area to another. We would probably be using both fixed  
13 wing and helicopter for a number of reasons. One, we use  
14 helicopters for ambulance service when we've got a lot of  
15 people around, they fly back and forth and see what's going  
16 on.

17 Q But, would you also be  
18 doing surveillance as a forest fire protection measure?  
19 Specifically for that purpose ?

20 A Specifically for that pur-  
21 pose? If we had a time when there was a high hazard period,  
22 in a high hazard area, yes.

23 Q I notice, Mr. Miller, that  
24 nowhere in your estimate of cost to the Government of the  
25 Yukon Territory, do you make any assumptions, that's the word  
26 you use most frequently throughout your study, I think, about





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1 the potential additional demand on forest fire protection  
2 services.

3 MR. MILLER: The forest fire  
4 protection services in the Yukon are operated by the Federal  
5 Government.

6 Q But it is, okay. But that  
7 may not always be the case.

8 A No.

9 Q You've included some re-  
10 ference to health care which is a moot point whether it is  
11 federal or territorial.

12 A No. The Federal Government  
13 now pays for forest fire protection in the Yukon. The Yukon  
14 Government does not pay any portion of costs related to  
15 forest fires. In the health case, the Yukon Government does  
16 contribute to the health cost.

17 Q That's why you left it out  
18 of your study, that it doesn't cost the territorial government  
19 anything, now anyway, eh? Is that why you left it out?

20 A My study was restricted to  
21 the Government of the Yukon.

22 MR. HORTON: Mr. Chairman, I think  
23 that concludes my questioning.

24 MR. CHAIRMAN: Thank you Mr. Horton.  
25 Now to Mr. Goudge.

26 MR. GOUDGE: The Alaska Highway  
Pipeline panel has a few questions.



1 CROSS EXAMINATION BY MR. TEMPLETON:

2 MR. TEMPLETON: Mr. Burrell, I think  
3 my questions are mainly to do, or, directed to you. I  
4 understand your application is for the Alaska Highway route,  
5 rather than a southern Yukon corridor.

6 MR. BURRELL: It's for a routing that  
7 follows an existing transportation corridor in the southern  
8 Yukon.

9 Q You can check through engineers  
10 data and progress when they start talking to each other,  
11 can't you?

12 Well, I guess that one of the problems  
13 then that we're having is that, that you're talking about a  
14 route, not a corridor.

15 A I guess I'd have to know what your  
16 definition of "corridor" is, because we've looked upon the  
17 Alaska Highway as being a transportation corridor as such,  
18 yes. So, I don't--

19 Q Well, take the definition of,  
20 say, the Pipeline Guidelines, this doesn't define the width  
21 of the corridor, but it talks about a broad corridor and  
22 since, I suppose, this, I don't, I suppose the Pipeline  
23 Guidelines are going to come into this consideration in  
24 the Cabinet's decision. I guess where I'm getting, Mr.  
25 Burrell, is there a possibility that you might decide to  
26 use another route or another corridor? Well, say the Klon-  
dike Highway corridor or are you going to apply for a



1 corridor along the Dempster Highway?

2 A Well, Mr. Hollingworth spoke  
3 to the Inquiry this morning about the information that had  
4 come out of the National Energy Board. I think this question  
5 really is something that I am, should not be addressing, it's  
6 something that Mr. Blair, as the Policy Witness of the com-  
7 pany should be discussing actually.

8 As we have it now and as we have said,  
9 that the application which we have is for a pipeline which  
10 parallels the Alaska Highway.

11 As to what would happen beyond that,  
12 really that's something that would properly be addressed to  
13 Mr. Blair, in his appearance.

14 Q Well, it has, I think the,  
15 there is a principle here that has a great deal of concern  
16 in any inquiry. You will remember that in the Canadian Artic  
17 Gas it did the same thing of addressing itself to a route  
18 rather than a corridor and then in the latter part of '75,  
19 I believe they changed over half the route. The name of the  
20 route was the same, but the actual route was different and  
21 it never got down to a corridor business of defining, first  
22 of all, a corridor and then saying a route within that cor-  
23 ridor. I think that we're in the same boat here. What  
24 I'm wondering is are you not in danger of finding the same  
25 as Artic Gas did, that they'd studies a particular route in  
26 detail, only to find in the Artic Gas' case, that Mr. Justice





1 Berger didn't agree with the corridor and we start all over  
2 again. I don't know how many, I can't help but think that  
3 if we could address ourselves to corridors and get that out  
4 of the way we could then put out a route inside the corridor  
5 and it would be a more logical succession.

6 Do you not think that there's a  
7 possibility that the, this Inquiry may come to a recommenda-  
8 tion on the Alaska Highway route, only to find that your  
9 then proposing another route?

10 A I can't speculate on that,  
11 Mr. Templeton, as I said, our application right now is for  
12 the, a line along the Alaska Highway and that's the applica-  
13 tion which we have put forward and are supporting. I be-  
14 lieve that, in my definition of a corridor, that, in fact, is  
15 is in a corridor, that we're looking at a pipeline within the  
16 Alaska Highway corridor.

17 I think you're, as I would interpret  
18 it, you're probably looking at a number of corridors, if you  
19 wish to call it that, but your definition of corridor and  
20 my definition of corridor may, obviously, differ. Q You're  
21 talking about a fairly narrow band and I'm talking about a  
22 broad one, I gather.

A. Right.

23 Q Well, does the, does Foothills  
24 accept the principle that the onus is on the applicant to  
25 demonstrate the impacts on the human and natural environments?  
26



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1                                   A           I believe that is the  
2 purpose of our socio-economic statement to evaluate the  
3 effects that the project has on the existing socio-economic  
4 and environment, this is with the information that we have  
5 at hand, this is what we have done, and we have said that this  
6 is an ongoing process. It's not something that is -- stops  
7 with the filing of our statement.'

8                                   Q           Yes, but there's a basic  
9 principle here, in Utility Regulation that the onus of  
10 proof as it's called in the Utility Regulation is on the  
11 applicant, for engineering adequacy and economic feasibility.

12                                  A           Certainly we put forward  
13 what -- the reason this Inquiry has been structured as other  
14 Inquiry's have been structured, to evaluate  
15 the applicant's proposal and see that it has covered the  
16 areas properly and in what areas it may be deficient So I  
17 think it's all part of the process which we put in our assess-  
18 ment.

19                                  Q           But, it's a matter of the  
20 onus of demonstrating the impact? In other words, is it  
21 the Inquiry's job to prove that you're not right, or is it  
22 your job to prove that you've demonstrated it?

23                                  MR. MACKIE: If I may point a comment  
24 at this time, this seems to be a legal question, I'm not  
25 sure Mr. Burrell is qualified to answer it. The procedure  
26 to date has been called by Foothills and all of the applicants



1 for the pipeline, has been to file what's being required by  
2 the National Energy Board. This appears to be an additional  
3 source of information and Foothills are willing to supply  
4 the information that's necessary.

5 I don't think it's a question of  
6 onus of proof.

7 MR. CHAIRMAN: It does seem to me  
8 that the question is one that could be deferred to the final  
9 submissions in any event by Counsel.

10 MR. TEMPLETON: Well, Mr. Chairman,  
11 are you liable to find yourself at the point somewhere along  
12 the line where you're going to be in the position of  
13 demonstrating that they haven't made the proof, they haven't  
14 demonstrated the impact. You see the question, the problem  
15 that I have is, that we have such a short time limit for  
16 your Inquiry, that it's very difficult for them to supply the  
17 -- to demonstrate the impact. Very difficult for others to  
18 question what they've said, and the whole principle of, in  
19 the onus of proof in the Utility Regulations as I understand  
20 it, is that the applicant does provide, has the onus of  
21 proof, and if he doesn't he stands the risk of having his  
22 applications thrown out.

23 MR. CHAIRMAN: I guess my difficulty,  
24 there, Mr. Templeton, I'm not suggesting that the Board may  
25 not have to address itself to this point at some stage in  
26 the deliberations, but it's not entirely clear to me how that



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1 affects the kind of evidence and the adequacy of the evidence  
2 if the proponent proposes to put forth.

3 It may be that Mr. Goudge has some  
4 observations on this point?

5 MR. GOUDGE: Let me say very briefly  
6 sir, that I have no doubt that your Board will be hearing the  
7 submissions about this issue. About, on whom the onus of  
8 persuassion, the onus of demonstration should lie, once you've  
9 collected all the evidence that can be made available to you  
10 in the time we have.

11 As to what Foothills position is on  
12 that, I anticipate that we would hear that at the end of  
13 the day. The one thing that I suppose is something that  
14 Foothills may now be in a position to say, is to give to you  
15 the basis on which they are approaching this process, which  
16 I would assume to be, the same as that they have appeared to  
17 have used in other forms and that is that they are attempting  
18 to discharge an onus of persuading, or an onus of demonstrating  
19 what they see the impacts to be.

20 I would think that that's the case,  
21 I don't know, I can't speak for them. But, I have no doubt  
22 that while the issue is one that might be touched on by  
23 Foothills at this stage now, it's clearly one that I intend  
24 at least, and perhaps others will as well, to raise with you  
25 at the conclusion of your Hearings, because it does seem to  
26 me that at that stage, it's an important issue to deal with.





1 MR. CHAIRMAN: Mr. Mackie, do you  
2 have anything to add at this stage, or --

3 MR. MACKIE: No, Mr. Chairman, other  
4 than to comment on Mr. Goudge. I think he's correct in saying  
5 that it's up to us to present what we feel the impacts are,  
6 and I would suggest that's been done.

7 Certainly it'll be up to the Inquiry  
8 to decide at a certain stage, if the information is given by  
9 us is adequate, or if more information is required to  
10 satisfy. It was my understanding this was the purpose to see  
11 what information was available and also to determine what  
12 further information will be provided, or is necessary for you  
13 to make a decision or recommendation.

14 Again, I would just suggest that it's  
15 too early to even discuss onus of proof or any arguments that  
16 deal with it. I would suggest we're not in that type of  
17 situation.

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1 MR. CHAIRMAN: Well, if I may, on that  
2 point, Mr. Templeton, to tie it up. It is an issue which the  
3 Board will be addressing, but, for the reasons that I've men-  
4 tioned and have mentioned, it would be my conclusion that a  
5 ruling this morning is not necessary on that, subject to  
6 whatever additional observations you wish to make now, I  
7 think the only concern we would have if you felt that and  
8 you wanted to address yourself to it, that a ruling here, or  
9 pressing this line of questioning did bear on what was going  
10 to be coming before us in the course of our hearing.

11 MR. TEMPLETON: All right, Mr. Chair-  
12 man, I'll go on to another subject.

13 Mr. Burrell, do you intend, before  
14 the hearings are concluded, to spell out the principles of  
15 control that will limit environmental and social change? By  
16 controls I mean controls of your employees, your contractors,  
17 suppliers, and your, the people who will be associated with  
18 your project?

19 MR. BURRELL: We've addressed these  
20 and will continue to address them as we present evidence  
21 before this Inquiry to our policy positions, Mr. Templeton.

22 Q Well, I had a bit of problem  
23 with some of them because I think it's, perhaps because you are  
24 so early in the stage, but, it's one thing to say some general-  
25 ities that we're not going to cause, we're not going to have  
26 people in a community, because we're going to have a camp



1 somewhere else. It's another thing to achieve it. What I  
2 think in any management role, which this is a tremendous man-  
3 agement role, very specific controls need to be spelled out  
4 and they're very difficult with a highway running along side  
5 because as you've said a number of times in the last two  
6 days, you're not all things to all people and you can't  
7 chain a person to his bulldozer. So, but to achieve the  
8 general things you have said in there takes some very skill-  
9 ful management and I'm wondering, I realize that perhaps  
10 you can't do that now, but are you going to do that?

11 A Well, we have these general  
12 policy positions and we would be developing procedures that  
13 would enable these policy positions to be carried out and  
14 one example of it right now is the manpower delivery system  
15 and all that entails and we're in the process of having  
16 discussions, preliminary discussions granted, but they will  
17 move forward to, with the government agencies and the unions  
18 and the contractors to develop such a procedure, if you wish  
19 to call it, which will not only satisfy what our policies  
20 will be, but also whatever terms and conditions are placed  
21 upon this project by the regulatory authorities.

22 Q Well, I wonder if you will be  
23 submitting your, the terms and conditions, if you will,  
24 that you're going to apply to yourself and its employees, in  
25 addition to those which you will have imposed on you from  
26 outside?





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1 A We were at the National  
2 Energy Board, we were asked to submit what our undertakings  
3 were and what we saw what the undertakings would be and the  
4 policy positions that project would have in the preconstruction,  
5 the construction and the O and M stage, and we have  
6 done that. So, in a sense we have, but really, here again  
7 it's not getting into the procedures, it's getting into  
8 what we're attempting to accomplish and so that the procedures  
9 would then developed to accomplish and fulfill the policy  
10 positions which we have, plus any, as I say, any terms  
11 and conditions that are placed upon the project by the  
12 regulatory authorities.

13 Q Well, I think that you mentioned  
14 that you gave for the O and M stage, the Operations and  
15 Maintenance stage, that the real social problems come on  
16 the construction phase.

17 A Yes, I said, no for the three  
18 categories, the pre-construction, the construction, and the  
19 O and M.

20 Q So this will be in the form of  
21 a, I don't want to---

22 A It's already been submitted  
23 to the National Energy Board and filed with this Inquiry.

24 As an example of, I'm just saying that  
25 we were asked to do that and we have done it, but really, the  
26 purpose of what, the purpose of, as the project advances, and



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1 you must admit that it's an orderly progression and we have  
2 established policies and I'm certain that as situations come  
3 up we will establish other policies to meet certain situa-  
4 tions, and then there will be procedures put in place to  
5 accomplish those policies.  
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1 Q These will say how you are  
2 going to limit your --

3 A There will be procedures as to  
4 how things will be done in another area. It may not be a  
5 point by point description, but certainly the arrangements  
6 in place to satisfy the, and to meet the policies and terms  
7 and conditions that are placed upon this project, the  
8 policies by our Company and the terms and conditions by the  
9 regulatory authorities.

10 To say that we have these procedures  
11 now, is not, we don't. They are in the process of being  
12 developed, or will be in the process of being developed.

13 I cited the Manpower delivery system  
14 as such an example.

15 Q Well, to the point -- how,  
16 for example -- when you say how you can keep your employees  
17 out of villages if -- and causing problems in those villages?

18 A How we will keep them out?

19 Q Yes.

20 I think you said in there,  
21 that you're going to put your camps at a distance, so you  
22 won't interfere with the communities. But how do you do that?

23 A We'll look at the situation  
24 and we'll locate the camps accordingly, and we'll, as Mr.  
25 Ellwood testified, we won't make casual transportation  
26 available. We will do these sorts of things. Now, there may



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1 be terms and conditions placed over and above that, but there  
2 are certain things that we, as a company are not in a position  
3 to impose, because we are living in a free country.

4 There may be matters which the  
5 Government themselves have to initiate. I can't say much  
6 more than that.

7 Q I recognize it's a whole  
8 difficult problem, but that's really, the presence of this  
9 Highway causes a great deal of problems, because it cuts  
10 down the number of things you can do.

11 If you were working in the winter  
12 time in a remote area, you don't have that problem. But you  
13 have it when you're working in the summertime along the  
14 Alaska Highway.

15 A We'll be certainly working  
16 very closely with the Government agencies to assure that  
17 the project minimizes, if you want to call it detrimental  
18 impacts to the greatest degree possible.

19 Q Well, that goes on to the  
20 next question then. Have you given consideration to what sort  
21 government  
of/organization is needed to control the activities, not  
22 only of your own contractors and suppliers, but the secondary  
23 effects of the projects effect on the human and natural  
24 environment?

25 A I know you're talking about  
26 a Government authority. That possibility may be necessary,





1 in order to expedite the project and to also have a central  
2 area of, area for discussion with Government agencies.

3 Q You've said in your, a great  
4 many things about, which most people would agree with, as to  
5 what you want to do?

6 A Yes.

7 Q What I'm talking about is  
8 how this occurs, and how you achieve it? You have said a  
9 number of times that's a government responsibility, and what  
10 I'm saying is, I wonder if Government recognizes that?  
11 Because I suspect they don't. I've only looked at the  
12 Dempster Highway to become very cynical, and so, and  
13 perhaps some of the activities on the Alaska Highway, you  
14 could become cynical, and so I say if you're managing this  
15 tremendous project, perhaps you have to go to Government and  
16 say, look you've got -- we can't do this -- you've got to  
17 do it. Maybe you'll even have to put up some money, I don't  
18 know, but are you planning this sort of thing?

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1                                   A           We're going to work very  
2 closely with the Government agencies in order the appropriate  
3 agencies, in order to, as I said, the term is to minimize the  
4 detrimental impacts of the project. We intend to co-operate  
5 fully with such groups towards that end.

6                                   You said I said repeatedly that it's  
7 Government responsibility. There are things that we can  
8 do within our sphere as a corporation, but there are other  
9 things which are outside our jurisdiction.

10                                  Someone has suggested a fence at  
11 the border of the 60th parallel, I mean that's -- even if  
12 that was to come about; it's not within our jurisdiction to  
13 do that. That's a matter that the Government would have to  
14 address.

15                                  Q           Well, I could quite agree  
16 with you, but when you say you're going to minimize  
17 environmental change, either human or natural. Don't you  
18 have to make those suggestions to Government<sup>of</sup>/what it has to  
19 do? Because you're studying it, and Government doesn't seem  
20 to be doing it to the same degree.

21                                  A           We've had discussions with  
22 Government about certain things that we should be doing. The  
23 prime one, I get back to again, is the Manpower delivery  
24 system, and that will go forward, and we expect that others  
25 will go forward too through consultation between ourselves  
26 and the appropriate agencies, and we, as I said before, can't



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1 say it enough really, that we are prepared to co-operate  
2 fully towards being sure that the projects in place that  
3 will minimize, I use the term again, will minimize the  
4 detrimental impacts.

5 Q I guess it's a matter of  
6 who initiates the effort, what we're talking about.

7 A The co-ordinated effort  
8 in many cases.

9 Q In, I think it was  
10 Magistrate Sprecker, giving testimony at the Berger Inquiry  
11 regarding his activities in a small community in Alaska. I  
12 think he said that Alyeska had a policy, or whether it was  
13 a written policy, but they didn't believe in prosecuting  
14 employees or others for property damage and he had a rather  
15 sad tale of what the effect of this.

16 Do you have any policy like that?

17 A Perhaps Mr. Littledale could  
18 speak to that matter.

19 MR. LITTLEDALE: I'm sorry, Mr.  
20 Templeton, would you, this gentleman, I'm not familiar with  
21 him, the one that you mentioned, and he came from where?

22 Q He was a Magistrate, I think  
23 it was in the Gold Creek area, I'm sorry the Copper Creek  
24 area. Glenallen, that was the town he lived in, during the  
25 period. <sup>When the Alyeska pipeline was in--</sup> It's in his whole evidence, and I haven't got the  
26 Volume, but it's around page 7205 in this part, and I just





1 wondered if you had any policy. I realize you don't have the  
2 necessarily the policies of Alyeska, but is there something  
3 inherent in the pipelining business that you just don't make  
4 a point of doing that, because it has social implications.

5 If you're not going to prosecute  
6 for property damage.

7 A Property damage of what?  
8 Perhaps, Mr. Templeton, if you gave me an example or made up  
9 a scenario, I could understand the question a little better?

10 Q Well, I think in an  
11 informal discussion, Sprecker gave the example of somebody  
12 having stolen a D-9 Cat, and got away with it. I think he  
13 borrowed the low-bed to cart it away.

14 A Yes.

15 Q And he turned around and  
16 sold it.

17 A Yes

18 Q And there was no prosecution  
19 of this. He just went back to the Teamsters Union and got  
20 a job on another spread and continued working. That has social  
21 implications.

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A I agree with you Mr. Templeton, and I understand one morning Alyeska woke up and found two hundred pickups missing. All of this is very bewildering to somebody like myself, as well. But all I can tell you is that our policy in Westcoast as one of the owner companies, is if we catch a thief, we prosecute him. If he's an employee or isn't an employee.

Q Would that be a policy of Foothills?

A Well, I'm not the policy witness, Mr. Burrell is. I would only say that I certainly hope it would be.

Q I'll leave that to Mr. Burrell then.

MR. BURRELL: Well that's true. The reason that I asked Mr. Littledale to comment of course, is to bring out the experiences that he has had with Westcoast, which, of course, is one of our sponsor companies, and the policies, as you know the policies of our sponsor companies are transferrable to ours, and from that standpoint, the answer is yes.

MR. SAKER: One point is that Foothills won't be owning any D-9's at all, so we won't have to worry about them being stolen from the company.

Q How about pickup trucks?



Cr Ex by Mr. Templeton.

1 A If they take two hundred  
2 they can take one I guess.

MR. LITTLEDALE: Mr. Templeton,  
a lot of what you say, you know, has happened, and some  
companies on very odd occasions where an employee has been  
caught with his hand in the till, so to speak, and the company  
has discharged him, but not prosecuted him. But, to my  
knowledge, these occurrences have occurred very infrequently.

9 If we find anybody sort of stealing gasoline or stealing  
10 chain saws or we have never found anybody stealing a D-9  
11 cat, but I'm sure we would prosecute.

Q Mr. Burrell, have you considered the accumulative, perhaps I'll change that, have you considered the effect of the paving of the Haines, the Department of Public Works is now embarking on, <sup>from</sup> the Haines Junction, Haines road on the Alaska border to the Alaska border in the north on the Alaska Highway?

18 A I know we have had dis-  
19 cussions with DPW, perhaps, Mr. Ellwood could elaborate on  
20 that.

21 MR. ELLWOOD: I have had discussions  
22 with DPW personnel here and in Vancouver with respect to their  
23 project. At this stage they don't yet have a construction  
24 schedule or much of a detailed plan as to the timing of the  
25 construction of various segments out there. Our discussions  
26 so far have been directed toward trying to get our schedule



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1 to fit together, so that we're both not working in the same  
2 area at once, sir.

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1 Q Inasmuch as the money is coming  
2 from the United States, it's quite possible that it will be  
3 governed by the availability of the American money and what  
4 I'm wondering about is, are you going to be able to stage  
5 them so that they don't occur at the same time?

6 A I couldn't give a definitive  
7 answer on that yet, until I, until DPW has worked up a con-  
8 struction schedule. Then we will finally know. The dis-  
9 cussions, at this stage, are directed towards having them  
10 informed of our plans and as they are working out what they  
11 consider to be the best plan for the highway, then we will  
12 be able to see how they fit together.

13 Q We rather get the feeling that  
14 there's these two fairly major projects coming together and  
15 with different funding and different management, and you  
16 sort of worry about whether you can really achieve this  
17 separation that you're talking about. Perhaps it will hap-  
18 pen.

19 A We feel confident that it can  
20 be so arranged and the people that I've talked to in DPW are  
21 also confident that it can be. Their project is scheduled  
22 over some ten years.

23 Q That could still come at the  
24 same time as some of yours.

25 A Oh yes, some of it is planned  
26 for the same time period as ours, but given that they are not



1 doing the whole thing in the same timeframe that we are,  
2 there is flexibility to have them work in one area while we  
3 are in another.

4 Q Well, isn't this just another  
5 example of the, looking at increments and not looking at the  
6 whole that we -- I'm finding a great deal of difficulty.  
7 NEB looks at certain things, and the Berger Commission looks  
8 at certain things, and the Hill Commission looks at certain  
9 things, and this Commission looks at certain things, and  
10 we're not looking at the cumulative impacts of them all.  
11 I, perhaps, should be addressing this to Mr. Trudeau, but  
12 he doesn't, I don't think, listen, so I thought I'd try it  
13 with you

14 MR. BURPELL: He's not on our panel,  
15 either.

16 Q But, when you're talking about  
17 minimizing and maximizing, you know, you can't help but look  
18 at what else is going on and there's other people going down  
19 the street and we've got to do our best to try to -- other-  
20 wise, I, when you add all the people that you bring, and  
21 all the people they bring and all the secondary people, it's  
22 a pretty major effort to this area and the social implica-  
23 tions are pretty serious.

24 I think we all agree - I don't think  
25 you disagree, but perhaps I'll give you the opportunity, Mr.  
26 Burrell, that some social and environmental change will be



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1 brought about, some adverse or detrimental change will be  
2 brought about by the project for both the social and natural  
3 enviroment fields ?  
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A Well, I think that any time you do anything that there is an impact. This project is no exception. As I said before though, that we are trying to develop policies and so on to keep that to an acceptable level, but to say that there won't be any impact would be totally false.

Q Well, have you considered paying compensation for this social change by providing free gas to those deemed to have suffered?

A Free gas to those? You mean natural gas off the pipeline?

Q Yes. If the pipeline has done some damage to the social fabric or the natural environment, to those people who have suffered, do you feel you should pay them in some kind of kind, rather than in 1970, or 80, dollars that may not be of very much use in the year 2000?

A We haven't looked at providing free gas, Mr. Templeton. We haven't done that.

Q But there's, isn't there a principle there. I think in Mr. Ellwood's testimony, he said, and I think you were talking about accidental damage, though I'm not trying to project that into the, beyond what you took it, but I'd like to ask you to consider it in a broader context. I think he said the philosophy of our compensation policy is basically that of a person who had



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1        been adversely effected shall be compensated in such a man-  
2        ner that he is equally as well off after the construction  
3        after the pipeline as he was initially.

4                                I think that's a good statement, but  
5        I'd like to carry that beyond the accidental damage. I'm  
6        not too sure what you meant but I, but isn't it a sound  
7        principle for all compensation. If you're going to do dam-  
8        age to the town of Whitehorsethat you're going to compensate  
9        it for it?

10                            MR. ELLWOOD:        I think the principle maybe is  
11        sound, Mr. Templeton, but the compensation policy that I  
12        outlined here was for accidental damage and I would give it,  
13        as my opinion, that when you get into more indirect matters,  
14        that rather than cash payment where you have to sit down  
15        with a balance sheet and calculate this matter, that there  
16        are other ways that a project such as this contributes here,  
17        or balances these things. One is through taxation, likewise,  
18        if we brought a benefit, we, if we're going to be required  
19        to pay compensation why do we not get compensated ourselves  
20        for the benefits." These things have to be put into the  
21        balance and it's, rather than a simple cash payment as we're  
22        talking about in the example that Mr. Littledale gave, a  
23        caterpillar running over somebody's outboard motor, that is.

24                            Q            I wasn't talking about a cash  
25        payment, because a cash payment effects only the immediate  
26        user, but when you're talking about the environment, you're



1 talking about a long-term effect. When you're talking about  
2 a social change to a town, it isn't just the person you hand  
3 the money to, it has long-term effects and is there, have  
4 you given consideration -- you said you agreed to the princi-  
5 ple and I realize you haven't spelled this and it's perhaps  
6 unfair to you to do it, but I'm asking you, have you given  
7 consideration to doing this for social change and environ-  
8 mental change as well as the damage to that outboard motor,  
9 because the social change is far greater then the damage to  
10 the particular assets that those people have acquired.

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26 MR. CHAIRMAN: All right.





1 I would suggest-- Mr. Burrell, did I stop you mid-sentence  
2 there?

3 MR. BURRELL: I wanted to say that  
4 as a general policy of this company that we are going to be  
5 responsible for the costs which are attributed to the project.  
6 In some areas there will be grey areas in which it will  
7 be difficult to really identify but we intend to sit down  
8 with the people that would be affected and develop some  
9 arrangement prior to the fact occurring.

10 MR. CHAIRMAN: Thank you. Mr. Goudge?

11 MR. GOUDGE: Just before we adjourn,  
12 I wonder if I might ask if any members of the public who have  
13 not done so already could speak to me if they wish later on  
14 to ask any questions of this panel. As well, could I see the  
15 representatives of the parties just after we adjourn for lunch.

16 MR. CHAIRMAN: All right, we will  
17 stand adjourned now until two o'clock.

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19 PROCEEDINGS ADJOURNED  
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1 PROCEEDINGS RESUMED PURSUANT TO ADJOURNMENT

2 MR. GOUDGE: I think, sir, we're  
3 prepared to resume and Mr. Templeton can continue with a  
4 few more questions.

5 MR. CHAIRMAN: I might just mention  
6 at this stage, with respect to the adjournment time, this  
7 afternoon, I propose to run through now until we adjourn  
8 without taking the usual afternoon break, and for those who  
9 are catching the aircraft we'll probably try and make our  
10 adjournment before 4 o'clock.

11 Mr. Templeton, you may proceed?

12 MR. TEMPLETON: Mr. Burrell, I  
13 think it was you, I'm not sure which one of the panel members  
14 mentioned, when we were talking about compensation, you  
15 said well, you were paying taxes and I think you suggested  
16 that this was at least partial compensation for damages.  
17 Is that right?

18 MR. ELLWOOD: I think that was my  
19 testimony, Mr. Templeton. I was suggesting that perhaps  
20 compensation might be too restrictive a word here, and one  
21 you look at overall cost benefit of a project like this,  
22 and has to figure in all of those matters.

23 Q Well, I think the problem  
24 that I'm talking about though, if you do a benefit cost  
25 analysis, you're doing it in dollars as I understand it.  
26 I think I'm trying to get it away from 1977 dollars, because



1 I don't have that much confidence in them, or dollars. Also,  
2 how do you get it into the people who will be damaged?

3 In other words, if you pay income  
4 tax, it goes to the Federal Government. But the damage to  
5 the environment or the social fabric comes to the community.

6 What I'm trying to get around is  
7 is there any way of the community receiving some kind of  
8 compensation, not necessarily in dollars, for the damages  
9 that they suffer?

10 A Well, I would think that  
11 they do receive, and again rather than use compensation  
12 in damage, to use the words cost benefit, it certainly is  
13 a benefit.

14 I think Mr. Littledale could recite  
15 to you some of the benefits that have flowed to the community  
16 of Fort Nelson in respect to improved educational facilities  
17 and medical facilities that are there. This is recreation  
18 facilities: Again you don't really count these things always  
19 in just straight dollar terms. The recreation facilities  
20 have a value beyond the cost of the -- of the capital cost of  
21 the structure that you erect there.

22 Q Are you comparing the  
23 Fort Nelson case. I'm not familiar with it. Are you  
24 comparing that to a long term industrial enterprise that  
25 is paying local taxes, rather than a two year project that  
26 has a lot of construction workers coming in?





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1 MR. LITTERDALE: By a long term enterprise,  
2 are you talking about the gas plant there, Mr. Templeton?

3 Q Well, I don't know. It  
4 was his example.

5 A Well, obviously a number  
6 of things happen. First of all whatever was constructed, both  
7 in the way of pipeline plant and compressor stations, there  
8 was a benefit from that and I suppose there was obviously  
9 an impact, and then Fort Nelson at the moment is not going  
10 through, at least in Westcoast, we're not doing any  
11 construction this year. But in the years 1974 and '75 and  
12 well into '76, we were doing plant construction there, and  
13 we peaked out, I believe in the neighborhood of between  
14 350 or 400 people there for that period of time, construction  
15 workers.

16 As to the sort of adverse impact  
17 there, Mr. Templeton, I'm not aware of any of any significance  
18 and I was just wondering if you have spent any time there  
19 yourself, sort of looking at it, as it's only a community  
20 in distance south of here, I believe in the order of 160  
21 miles to the south. Now, by that I'm not talking road miles,  
22 I'm talking north and south.

23 It's probably a good example, because  
24 of it's proximity to the Yukon and it is an Alaska Highway  
25 community. Both pipeline plant, construction, compressor  
26 station construction has gone on in the area, and therefore



1 if you want to put it -- the Fort Nelson experience might be a  
2 good one to sort of look at.

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1 Q Well, the distinction that  
2 I'm trying to make is in a project that is longer termed  
3 than this pipeline shall be, when you say, for example, that  
4 you're going to have the camps outside of Whitehorse, but  
5 Whitehorse will suffer an impact because of your construc-  
6 tion workers. Now, I can realize that you're going to say,  
7 well, it has some advantages, too, but to those people  
8 who aren't in the, in selling products or doing things for  
9 the pipeline, they suffer a damage. What I'm trying to get  
10 at is, are you compensating these communities, are you going  
11 to compensate communities for the damages that are suffered?

12 A What sort of damage are you  
13 talking about, Mr. Templeton?

14 Q Well, you could start with the  
15 environment, the natural environment or a social problem.

16 A Could you make it one at a  
17 time?

18 Q All right, we'll take drinking

19 A Okay.

20 Q Prostitution, take any one of  
21 the social problems that have been found to increase due to  
22 an influx of workers.

23 A Well, by increase and influx  
24 of workers, are you suggesting that, sort of the consumption  
25 per capita of alcohol, unless they deal with drinking in the  
26 first instance, consumption of alcohol per capita has gone



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1 up, is this what you're saying?

2 Q Well, it may be the whole alco-  
3 hol problem.

4 A Well, if you would be specific  
5 with me, then I could answer your questions. Are you say-  
6 ing that because the construction worker and suddenly, you  
7 know, you have a construction project on your doorstep every-  
8 body in the community that, may-be, was a moderate drinker  
9 started to drink more heavily and therefore this is an ad-  
10 verse impact, is that the sort of thing that you're suggest-  
11 ing.

12 Q Of course, if you have a large  
13 number of construction workers in a community who are drink-  
14 ing they cause social problems, don't they?

15 A A large number of construction  
16 workers in a community cause social problems because they're  
17 drinking. Well, again citing Fort Nelson, we had our camp  
18 out at the station site, which was 15 miles from the town  
19 of Fort Nelson and we could not and, you know, in our dis-  
20 cussions with the authorities in the town, the town council,  
21 the RCMP and so on, see any problem with our construction  
22 workers. Most of them stayed in the camp 15 miles away.  
23 They were there for one reason, not because they liked to  
24 come to Fort Nelson, they were there to come to make money  
25 and then, it being seasonal, they make as much money as they  
26 can on a construction job and then go back to their homes.





1 The idea of coming there certainly wasn't to, you know, have  
2 a big party.

3 Now, certainly you get a few construc-  
4 tion workers which go into a bar and have a few drinks and  
5 maybe the odd one would have one too many, and I'm not say-  
6 ing that that doesn't happen or never did happen. But you  
7 get that with tourists and everything else, but we certainly  
8 didn't see any increase in that sort of activity, nor did we  
9 see any increase in such things as prostitution. Now, there  
10 was a time when I think there was some other construction  
11 work going on up the highway and certain number of prosti-  
12 tutes did come up from the south and the RCMP were very  
13 alert to this situation and chased them out.

14 Q Did you read Magistrate  
15 Sprecker's testimony at the Berger hearing?

16 A I think I indicated before that  
17 I hadn't, but I don't think I ever --

18 Q No, I don't have any knowledge  
19 of your Fort Nelson <sup>experience</sup> /so I'm not going to argue that, but I  
20 have worked on construction all my life and your definition  
21 of <sup>how</sup> /construction people operate is different then mine has  
22 been, that how you keep a bunch of construction workers in  
23 a camp in the summer time in the Yukon. I worked on the  
24 Alaska Highway when it was being built and lived out here at  
25 McRae and I can assure you that I and the others I was  
26 working with were not as model citizens as your talking about.



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Miller

Cr Ex by Templeton

1                                   A           That's true, Mr. Templeton,  
2       I'm sure that that was the case, but I think if we go back  
3       to the early days of the Klondike Gold Rush, things were  
4       very much active and boisterous, if you want to call it that--

5                                   Q           I'm not that old.

6                                   A           And I'm not sure how far you  
7       want to take me back. Probably in our relative experiences,  
8       my construction experience is probably, and I'm only gues-  
9       sing and if I'm wrong, please correct<sup>me</sup>/, but it's probably  
10      more up-to-date than your own and I've been in it in a more  
11      modern timeframe and I can assure you we live in a changing  
12      world.

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Littledale, Saker, Ellwood, Burrell;  
Miller.  
Cr Ex by Mr. Templeton.

1 MR. SAKER: Mr. Templeton, you  
2 also have the reflection that all of us on construction  
3 are drunkards. I'm not yet. However, I'd like to relate to  
4 you my own experience living in a small town of Saskatchewan,  
5 Outlook, by name. We were 22 miles from the South Sas-  
6 katchewan Dam. I lived there 4 years. Peak construction  
7 employment was 1,300 men. The town population was 1,500.  
8 We moved in <sup>with</sup> the company, there were several others there.  
9 We built 20 homes in the town, lived while we were building  
10 the dam, and we left. The houses were bought by local  
11 citizens, and you keep referring to suffering damages.  
12 Outlook did not suffer at all. The damages they  
13 enjoyed more than they suffered. So again, I reiterate what  
14 Mr. Littledale says, perhaps our experience is a little more  
15 modern than yours and when the Alaska Highway was.

16 Q I'm rather surprised  
17 because you and I both worked on, or had things to do at the  
18 Kettle Dam site in Manitoba in the last few years, even though  
19 I do come from perhaps the Gold Rush days, but that is still  
20 going on <sup>incidentally</sup>. So I think there are perhaps a diffe-  
21 rent definition of social problems that is defined by a  
22 construction worker than a person who is living there, and  
23 makes his home, and is perhaps of a somewhat different  
24 culture than a construction worker. And we're talking about  
25 that.

26 A These were construction



1 workers that lived in the town of Outlook and we doubled that  
2 population not by natural means, just by moving in in the  
3 4 or 5 years that we were there.

4 Q I think you've answered the  
5 question.

6 A Outlook really enjoyed  
7 the fact that the Gardner Dam was built.

8 Q Perhaps we'll go on to  
9 something else. I noticed in your submission, Mr. Burrell,  
10 that I was a little surprised that you accepted the principle  
11 by without actually saying it that every MCF of gas that came  
12 across the Alaska border was going to be delivered to the  
13 border on the 49th parallel.

14 MR. BURRELL: Well, that's not true.  
15 You are referring to, of course, the fuel which will be used  
16 in compressor stations.

17 Q No, no, I'm not talking  
18 about that. I realize that the gas for the compression is  
19 going to come out of the pipeline. But I wonder if you, I  
20 can't accept the principle that that gas, you say you were  
21 going to compensate, if you used some in the Yukon, you  
22 replace it in Alaska. Now if there is damages, why can't  
23 that be taken out, because it's a cost to Canada and to the  
24 communities along the way, in compensation for their damages.  
25 Why shouldn't the Alaskan, the American gas be used as  
26 compensation? Why take the Alberta, why say everything





1 has to come from Alberta?

2 A Perhaps, you could repeat  
3 that, Mr. Templeton, I had a conversation going here at the  
4 table at the same time, I'm sorry.

5 Q In your submission you seem  
6 to accept that every MCF of gas, apart from the compression,  
7 taken out in the Yukon, would be compensated by gas from  
8 Alberta --

9 A Yes --

10 Q And my question is why  
11 can't American gas, since this is a, we're accommodating the  
12 United States by putting it through Canada, and of course,  
13 there are damages and advantages to Canada, and all that, but  
14 why can't that American gas be used to compensate those  
15 people along the route who are damaged?

16 MR. MACKIE: Mr. Chairman, before  
17 Mr. Burrell answers, I think it is clear that our position is  
18 that the gas would come from Alberta. Certainly there are  
19 alternatives, but it's our position as it's been expressed.  
20 Anything else would be purely hypothetical, and I'd also  
21 suggest that perhaps it is in violation of the Canada-U.S.  
22 Gas Treaty. We are getting into a legal question.

23 MR. CHAIRMAN: I'm not entirely  
24 sure that I follow that -- Mr. Burrell do you propose to  
25 respond to the question?

26 MR. BURRELL: One thing is, is that



Littledale, Saker, Ellwood, Burrell,  
Miller.

Cr Ex by Mr. Templeton.

1 the gas that is flowing through that line, of course, is U.S.  
2 gas. I think you would have to appreciate that, Mr. Templeton.  
3 And compensation for damages, I think that Mr. Ellwood has  
4 made it clear that the Company is going to compensate for  
5 damages which are attributable to our project. Now, as I said  
6 earlier, that our project is prepared to accept the respon-  
7 sibilities of anything that our pipeline causes, any  
8 impacts that our pipeline can be directly attributed to our  
9 pipeline. And also, there are, as I said before, gray areas  
10 in which there may be uncertainty as to whether it's directly  
11 attributable to the pipeline, but certainly in those areas  
12 we're prepared to discuss with the groups that are involved  
13 that would have to accept the cost, if we didn't, and work out  
14 some arrangement beforehand. Now as far as who pays for that,  
15 it's all part of the cost of the project and it's rolled into  
16 the overall cost of service. So the U.S. is in fact paying for  
17 those costs.

18 Q Yes, but if you can --  
19 sorry, go ahead.

20 A You're suggesting that gas  
21 be one way in which to compensate that. I'm saying that the  
22 cost attributed to this project be rolled into the cost of  
23 service and the U.S. pays for it anyway whether in fact you  
24 can supply gas to offset those costs or not. The U.S. is  
25 still paying for the costs associated with this project.  
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Littledale, Saker, Ellwood, Burrell,  
Miller  
Cr Ex by Templeton

1 Q I think it's a matter of  
2 time, I think you're talking about compensation in dollars  
3 today, and what I'm trying to do is to say compensate the  
4 people on the long term over the life of it, so that it  
5 doesn't appear as a straight cash donation in that --

6 A But the supply of gas at  
7 no charge is a dollar compensation. It's just in another form.

8 Q But it isn't going to stay  
9 perhaps at a dollar through the life of twenty-five years.  
10 If you look at the last five years, look what's happened?

11 A But, we would be, the  
12 project would be paying for those costs at the time they  
13 occur and in the true value of whatever responsibility  
14 we have --

15 Q How do you compensate then  
16 for a moose? If you're paying it in today's dollars, well  
17 you say there's so many pounds of meat and we'll pay for it  
18 at the supermarket price, but that doesn't compensate for  
19 the moose's progeny?

20 A I didn't hear the last --

21 Q Progeny.

22 A Well, as far as this overall  
23 compensation is concerned, Mr. Ellwood, I think has stated  
24 in very general, a general position on this matter, and  
25 as I said before, if we want to pursue this to any great  
26 length, I think it's a matter that Mr. Blair intended to



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1 discuss. As I said, in general terms, that this project will  
2 be responsible for the costs which it incurred. What  
3 you're describing here is in what manner which these costs  
4 might be compensated, and we're saying that there are  
5 different ways to do it.

6 Perhaps you have a different opinion  
7 of how it might be done than we would, but I think that  
8 the object that you're talking about and what we're talking  
9 about, that the project be responsible for the cost  
10 which can be traceable to it are there.

11 Q All right, I'll accept  
12 that. I think you will admit that there are certain things  
13 that it's very difficult to compensate for.

14 A Yes, that's true.

15 Q So, it evolves then, that  
16 the Company needs to have fairly rigid controls to see that  
17 it doesn't --

18 A Well, we're getting back  
19 into what we discussed this morning about our policy positions.  
20 I take it that you're not objecting to those, it's just  
21 the procedures necessary to follow them through and we said  
22 that we'll develop as part of the ongoing, as part of the  
23 project, we'll develop those procedures necessary to ensure  
24 that our policies and the terms and conditions that are  
25 contained in the permit are realized.

26 Q Okay, Mr. Burrell, I realize





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Littledale, Saker, Ellwood, Burrell,  
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1 that these questions have been of a policy nature, but I  
2 felt-- I thank you for going along with me. I hope that  
3 Mr. Blair will take them into consideration and I thought  
4 it was better to put them forth to you today, rather than  
5 to spring them on him at a later date, because  
6 I think the whole matter of compensation and how it gets to  
7 the hands of the people who are damaged is fairly important.

8 That's all the questions I have  
9 Mr. Chairman.

10 MR. CHAIRMAN: Thank you, Mr.  
11 Templeton.

12 MR. SAKER: Mr. Chairman, before  
13 Mr. Templeton goes, if he suggests that there should be  
14 compensation for pipeline that the Americans are using to  
15 run their gas, has he thought of how, we as Canadians,  
16 might be asked to compensate the Americans for the pipeline  
17 that runs through Michigan on it's way to Ontario, should it  
18 ever arise? And is he aware of how many years that pipeline  
19 has been underground to date? To the best of my knowledge,  
20 the Canadians have not been asked to compensate the Americans  
21 for any damages they may have suffered?

22 You should be aware Mr. Templeton,  
23 of this pipeline that leaves Canada, I believe, on the  
24 Manitoba border.

25 MR. TEMPLETON: I'm also aware that  
26 those same communities on the pipeline are using a great deal



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Miller

1 of Canadian gas, which is a part of Canadian heritage, so I  
2 think we're in the wrong subject --

3 MR. BURRELL: I was just wondering  
4 I'm curious, if you knew the price they were paying for the  
5 gas, Mr. Templeton?

6 Q You mean along those  
7 communities?

8 A Yes? That's fine --

9 Q No, I'm sorry I don't.

10 A -- I was curious

11 MR. GOUDGE: Before we get this thing  
12 gets absolutely stood on its head, Mr. Templeton will be  
13 available for questioning next week.

14 Next on our list would be Mr. Taves  
15 for Canadian Arctic Gas.

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Littledale, Saker, Ellwood, Burrell,  
Miller  
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1 CROSS EXAMINATION BY MR. TAVES:

2 MR. TAVES: As I understand it, the  
3 basis of the evidence is 5(a) the policy statement. Is  
4 that right?

5 MR. BURRELL: I'm sorry, I can't  
6 hear you.

7 Q Oh, I'm sorry. As I under-  
8 stand it, the basis for the evidence that's been produced  
9 the 5(a) - the volume everybody calls the  
10 5(a) Statement, is that right?

11 MR. CHAIRMAN: Volume 5(a). Mr.  
12 Taves is referring to Volume 5(a).

13 A Yes, but I couldn't hear his  
14 question.

15 MR. TAVES: What I was trying to say was  
16 that I gather that the basis for your evidence, and every-  
17 body else's evidence, is the volume of information called  
18 5(a). Is that correct?

19 A Yes.

20 Q I'd like to direct some  
21 questions to the author of that document.

22 A We say that's part of the  
23 support information that we've utilized. I think we  
24 explained that as we were reading in our prepared evidence.

25 Q Yes, what I'm trying to find  
26 out is which member of the panel I should direct my questions



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1 to, as the author of that document?

2 MR. ELLWOOD: I was involved with  
3 supervising the consultants that prepared that document so  
4 you could direct questions to me.

5 Q Oh, I see. You supervised  
6 the North Group, would that be them?

7 A Yes.

8 Q They are a local group here?

9 A Yes, they are.

10 Q I gather you put the italicized  
11 portions in 5(a), which is the policy statement of the  
12 company.

13 A Myself and Mr. Burrell. Other  
14 members of the company who would be responsible for that  
15 area would write the policy statements, yes.

16 Q Your job was of supervisory  
17 capacity, basically.

18 A Yes.

19 Q Did you do any studies on any  
20 other proposals, like the Dempster route?

21 A We've had some general discus-  
22 sions about such things, but not any studies that ---

23 Q You haven't reduced anything to  
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1 paper or anything like that?

2 A No, sir.

3 Q If I could, I'd like to first  
4 of all sort of clear up some things I'm confused about from  
5 the first week of this hearing and then go into a general  
6 line of questioning.

7 The first item that I wasn't positive  
8 about was an item raised by David Joe, regarding the Indian  
9 Land Claims. I realize that may overlap, but I'd like to  
10 ask it now. Mr. Burrell, or is it Mr. Burrell?

11 MR. BURRELL: The latter.

12 Q Mr. Burrell, I don't think  
13 you ever did give the policy of your company. You stated  
14 that it was clear but I didn't ever get what it was, could  
15 you put it down in a sentence.

16 A Yes, I said that the matter,  
17 that matter plus other policy matters had been reserved for  
18 Mr. Blair to testify to and I have said that he had taken,  
19 as Chief Executive Officer of this company, had taken a  
20 particular interest in that item and that he was going to  
21 appear before this Inquiry to speak to that matter and other  
22 matters and we had left it at that.

23 Q I realize that, but I was  
24 wondering if you also knew what the policy was, as well as  
25 Mr. Blair and if so, would you tell me? I just want to ask  
26 a second question, that's all.



Littledale, Saker, Ellwood, Burrell,  
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1                                   A       Well, his policy, the policy  
2       on the matter is contained in the evidence which he present-  
3       ed at the National Energy Board the other day.

4                                   I have that here and I'm  
5       sure you have it, too.

6                                   Q       What I have is a policy paper  
7       which, apparently, was delivered due to a, because of the  
8       undertaking. Is that what you're referring to?

9                                   A       No, I'm referring to his  
10      evidence which he presented at the National Energy Board.  
11      I'll see if I can find it here.                   I'm not sure  
12      whether this has been filed with this Inquiry, but it's  
13      dated April 29th and it's called "The Policy Evidence of  
14      S. Robert Blair, President of Foothills Pipe Lines and  
15      Foothills Pipe Lines (Yukon) Ltd."

16                                  Q       Oh, yes, I think we're  
17      talking about the same thing.

18                                  A       And in this he deals with a  
19      number of matters, one of which is the native situation.

20                                  Q       The reason for my question,  
21      Mr. Burrell, I simply wanted to get your opinion. As I  
22      understand your application, you'll be looking for the right-  
23      of-way and things by about 1978, if possible, so you can do  
24      your surveys and things like that. Is that right?

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Littledale, Saker, Ellwood, Burrell,  
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1 A Yes.

2 Q And I'm wondering if you  
3 think it's feasible that the Indian Claims will be settled  
4 or compromised or, I believe the words he uses, by that time,  
5 because I presume that the property covering the right-of-way  
6 would be automatically excluded from any Indian Land Claims.

7 A I think at this point in  
8 time, the position is that the schedule which we have put  
9 forward is reasonable, in connection with the development  
10 of the Claims.

11 Q You see no time lag, in  
12 other words, beyond this year?

13 A I say at this point in time  
14 we certainly feel that the schedule we put forward is, is  
15 still reasonable.

16 Q My next question was, I see  
17 in several places reference to the fact that equity partici-  
18 pation by Yukoners will be available at, or will be  
19 encouraged. I was wondering if you could describe to me the  
20 details of that particular program?

21 A The particular program, and  
22 this is another matter which Mr. Blair will be addressing, in  
23 evidence that we've presented before the National Energy  
24 Board, we have cited the situation in Alberta, when Alberta  
25 Gas Trunk Line started they offered to Albertans shares at  
26 a cost which was no greater than, at the lowest prices which



Littledale, Saker, Ellwood, Burrell,  
Miller  
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1 the shares had been offered, and these shares were picked up  
2 by Albertans and I can look up the numbers here, but since  
3 then they split I believe 4 to 1, and I believe they've been  
4 trading on the market at, I think, \$14.00, so that makes  
5 them worth \$56.00 and I think they've paid over \$20.00 in  
6 dividends, so that's an example --

7 Q This is --

8 A -- just let me finish,  
9 please.

10 Q Yes.

11 A -- and there was an  
12 attractive share offering made to Albertans. They were also  
13 offered shares under the Alberta Energy Company. Now the  
14 structuring of such equity participation by this company hasn't  
15 been fully developed and Mr. Blair is prepared to speak to  
16 that matter when he appears as a policy witness.

17 Q Thank you.

18 MR. CHAIRMAN: Out of a point of  
19 clarification, Mr. Burrell, you mentioned what the selling  
20 price, but you didn't mention what the initial price was.

21 MR. BURRELL: \$5.00.

22 MR. CHAIRMAN: \$5.00, yes.

23 MR. TAVES: The next area I'd like  
24 to explore is, well I'd like to put into perspective if I  
25 possibly could, the various questions I've heard some from  
26 Mr. Templeton, some from other Counsel, and I think the best





Littledale, Saker, Ellwood, Burrell, .  
Miller  
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1 way for me to do that is to go through the 5 A. statement in  
2 rather abbreviated form.

3 I notice that you deal with historical  
4 population changes, beginning with chapter 3. For example,  
5 on page 3.6 you indicate that there was a boom of 30,000  
6 fortune seekers, 1888, 1898, 1899. The publicity brought  
7 30,000 people. I'm wondering if you've done any -- when you  
8 researched that did you find out how many of these people  
9 that came were unemployed at the time?

10 MR. ELLWOOD: How many of those that  
11 were unemployed at that time? No, there's no statistics  
12 available on that?

13 Q Do you know where the  
14 hiring halls were for that particular project?

15 A There were no hiring halls  
16 that we know of, for the gold rush.

17 Q There were no hiring halls?  
18 That's the highway that's right.

19 In that case, let me move on. You  
20 then state that between 1900 and 1910, the population  
21 decreased to about 10,000 people. The post rush period. Have  
22 I got that correct?

23 A Yes.

24 Q Are you aware that the  
25 gold rush in the Yukon caused a similar population boom in  
26 Alaska at the same time?



Littlejohn, Saker, Ellwood, Burrell,  
Miller  
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1 A Yes, there was an influx  
2 of people to Alaska as well. The primary gold fields were  
3 very near the border and the whole area was being explored.

4 Q So, the reasons for the  
5 population boom in Alaska would be the same reasons as that  
6 in the Yukon, namely, the gold rush.

7 A Yes.

8 Q Well, on page 3.9 you deal  
9 with the Alaska Highway, which where suddenly 20,000 men  
10 arrived.

11 A In Whitehorse, yes.

12 Q That's right. You are  
13 aware that the construction in that particular project caused  
14 a similar population boom in Alaska?

15 A I expect it did, yes.

16 Q If I told you that the  
17 population of Alaska increased by some 40,000 during that  
18 period would you agree?

19 A I don't know what the  
20 number is, but I would --

21 Q It's reasonable?

22 A Yes.

23 Q And I presume you would also  
24 agree that it is reasonable to assume that the reasons for  
25 the population boom in Alaska was also the construction of  
26 the Highway as it was in the Yukon.



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Cr Ex by Taves

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MR. MILLER: I don't think that's a valid assumption, sir, the build-up in Alaska was primarily a result of the war effort, not because of the building of the highway.

Q Oh, I see, at the same time.

A That's right, that's why they built the highway.

Q Okay. I presume you're also aware that the construction of the Alyeska Pipeline, in Alaska, caused a population boom in Alaska.

MR. ELLWOOD: Yes, I'm aware of that.

Q I gather you're aware that during the peak construction period of the Alyeska Pipeline, there were some 56,000 in-migrants in Alaska, that would be 1975?

A That would fit with what I know of the situation, yes.

Q The two year total, '74 - '76, was some 100,000 in-migrants.

A That's my understanding, it would be on that order of magnitude.

Q Now, dealing with this project, I gather that, from the 5(a) Statement, that you have not analyzed the total in-migration that will occur because of the proposed construction of this pipeline. Is



1 that correct?

2 A No, I don't think that's cor-  
3 rect. Consultants have made estimates in there of what  
4 they feel to be the in-migration as a result of this project.

5 Q Where is that figure? What  
6 figure-- how many people will in-migrate?

7 A It is page 5(a), 5.7.

8 Q Would that be the figure  
9 1,380 people?

10 A Yes, that's the projection  
11 that was made.

12 Q Well, how many people, how  
13 dependents does the typical in-migrant have?

14 A Two point three.

15 Q Well, that's the rate of  
16 population to labour, you say.

17 A The ratio of population <sup>to</sup>  
18 labour 2.3 to 1.

19 Q I presume that you're assuming  
20 that the only people that will come to this will be people  
21 that are labour, that have jobs, I gather. Is that correct?  
22 On the pipeline, is the basis for the 1,380 figure?

23 A No, these are people in excess  
24 of the construction crews.

25 Q You estimate that 600 people  
26 could migrate to the Yukon to join the labour force? These





1 in excess of your hired construction crews?

2 A Yes.

3 Q That's your statement. And  
4 they will bring with them another 2.3 each, is that your  
5 estimate?

6 A Another 1.3 each.

7 Q Well, could you explain to me  
8 the figure, the ratio of population to labour is 2.3.

9 A Well, it's just what it says,  
10 there are 2.3 people in a population for every participant  
11 in the labour force, if you wish. So that out of the 2.3,  
12 you have one of them who is obviously in the labour force  
13 and --

14 Q Oh, I see.

15 A One point three dependents.

16 Q I see. Is it reasonable to  
17 assume that these in-migrants will use the Alaska Highway?

18 A Yes.

19 Q To get here?

20 A Well, some may come by air-  
21 craft. I say that I wouldn't expect a great deal of people  
22 to come that way.

23 Q When you did this study, did  
24 you use the Alaska experience as an analogy or a guide?

25 A Not really, we don't find it  
26 applicable.



Littledale, Saker, Ellwood, Burrell,  
Miller  
Ex Cr by Taves

1 Q What is the basis for that  
2 statement?

3 A The difference, primarily the  
4 difference in the hiring situation, the hiring practices and  
5 procedures between the United States, particularly  
6 Alaska and Canada, particularly Yukon.

7 Q So, is it fair to say that  
8 you looked at the situation and decided that it was not  
9 applicable?

10 A That's fair to say, yes, it's  
11 something that needs to be looked at, but in, it's not  
12 useful to take Alyeska's statistics, or Alaska's statistics  
13 and use that as a formula over here.

14 Q Oh, no, I wasn't suggesting  
15 that for a moment. I was thinking more in terms of an analogy,  
16 a historical precedent.

17 Do you know, all right, I suppose you  
18 know the concept of the multiplier used by economists when  
19 doing these sort of studies?

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26 Q You don't know what it says?



Littledale, Saker, Ellwood, Burrell,  
Miller  
Cr Ex by Taves

1 A No, we haven't finished it  
2 yet, so I don't know.

3 Q When is the panel coming on?  
4 Is the panel next week did you say? This panel? On in-  
5 migration?

6 A I understood it to be in July.

7 Q Oh, July, I'm sorry, I didn't  
8 hear you.

9 Mr. Ellwood, you've forecasted  
10 direct employment on the pipeline construction. May we deal  
11 with that part of 5(a) today?

12 A Yes.

13 Q And that, as I recall, I  
14 read somewhere, the peak would be 1,700, there are 1,379,  
15 700 thereafter, a peak period of 1,700 I believe in one year,  
16 and some further peak periods during construction of the  
17 compressor stations. Is my understanding about right?

18 A No, those were earlier  
19 projections. The figures have been revised, as a result of  
20 our -- the <sup>latest</sup> revision takes into account the 48-inch project  
21 as opposed to the earlier 42.

22 Q Could you give me the  
23 new figures?

24 A The new peak is 2,311 in  
25 the summer of 1980. If you want I can just put this on the  
26 record as it -- the 1979 in the wintertime as we start to





80  
Littledale, Saker, Ellwood, Burrell,  
Miller  
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1 staff-up some twenty people involved, building up to 2,143  
2 in the summer of '79, falling off in the winter to, falling  
3 off considerably during the fall, and building up again in  
4 the winter to 1,996, that's winter of 1980 , again it falls  
5 off during the spring break-up, and builds up again in  
6 the summer to 2,311, falls off again in the fall, builds up  
7 again in the winter of 1981 for the last pipeline construction,  
8 it is 1,041 people, falling to 415 in the summer of 1981 and  
9 to 245 through the winter of 1982.

10 Q Are you aware that in  
11 Alcan's submission to the FPC for 731 miles of pipe, they  
12 estimate a peak of 5,915? You have 509 miles of pipe with  
13 a peak of 2,300. What are the reasons for that kind of  
14 a divergence?

15 A Perhaps Mr. Saker would like  
16 to speak to that one. One obvious one that comes to mind and  
17 that is the different terrain they will be building  
18 chillers on their station, more people are required for  
19 that.

20 MR. SAKER: The prime reason  
21 is the productivity of the Canadian welder and the  
22 Canadian pipeline.

23 Q Well, that's good to hear.  
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Littledale, Saker, ~~Ellwood~~, Burrell .  
Miller  
Cr Ex by Taves

1 The question I wanted to ask was, having revised, is it  
2 possible that the peak employment could go higher than  
3 2,300.

4 A Yes, it's possible, it could  
5 go either way from there.

6 Q It could go up, it could go  
7 down?

8 A Yes.

9 MR. SAKER: It's not likely to vary  
10 too much, because these are based on the actual crews that  
11 we used in the very broad estimates that we prepared. We  
12 used the services of a contractor to provide us with the  
13 additional information. The crew and the manpower built  
14 up from what we would assume would be the actual working  
15 force.

16 MR. CHAIRMAN: Before we leave that  
17 subject, Mr. Ellwood, has that chart been filed, the one  
18 you're referring to just now, with the more recent figures  
19 and if not, do you propose to do that?

20 MR. ELLWOOD: Yes, we could. It  
21 may be in some of the documents we've filed. I'll just  
22 check that and if not I'll file this and there is a graph  
23 that goes with it showing the -

24 MR. CHAIRMAN: This would be some-  
25 thing like this one --

26 A Yes, like that.



1 MR. TAVES: With your new figures,  
2 Mr. Ellwood, have you, you know, have your consultants  
3 analyzed how many other jobs will be created with the  
4 2,300 or so direct jobs?

5 A Pardon me? I didn't catch  
6 all of your question there.

7 Q Have your consultants analy-  
8 sized how many other jobs in other sectors will be created  
9 by the jobs in the pipeline?

10 A These figures that I just  
11 gave you are not limited to direct pipeline jobs. They  
12 also include the indirect as project management, the com-  
13 pressor stations, grounding material, logistics and those  
14 sorts of things, the support for the actual pipeline crews.

15 Q I was referring to jobs in  
16 other sectors of the economy, Mr. Ellwood, what is known in  
17 the vernacular, I understand, as secondary and induced employ-  
18 ment.

19 A Yes, we've had a look at that.  
20 I don't have those figures with me right at the moment, but  
21 that again will be dealt with on the next panel.

22 Q In other words, they are not  
23 in the 5A document, they will be coming. Is that correct?

24 A I'll refresh my memory on this  
25 They were included in the projections in the 5A documents  
26 for the 42 inch case, but the 48 inch will be coming with



Littledale, Saker, Ellwood, Burrell, .  
Miller,  
Cr Ex by Taves

1 the next panel.

2 Q Do you know what that amount  
3 was, off hand?

4 A No, I don't.

5 Q Have, in the new documents  
6 that will be coming, have they projected how many <sup>similar</sup> secondary  
7 induced jobs will be created in the Operations and Mainten-  
8 ance areas?

9 A Yes, that will be handled in  
10 the documents that are coming.

11 Q I gather that the various  
12 statements, for example, in Mr. Miller's evidence, I think  
13 he assumes for various things that the population estimates  
14 in the 5 A documents, which I presume are not the popula-  
15 tion estimates, will be filed by your second panel. Is  
16 that right?

17 MR. MILLER: In making my assumptions,  
18 I used the, in those cases where there are population numbers  
19 attached and there are few cases, I have used the 42 inch case,  
20 that's correct.

21 Q Yes, so for things like, I can  
22 think of now the welfare, which I believe was based on an  
23 assumption of population, that particular study, I gather,  
24 is not obsolete.

25 A No, that isn't true. The  
26 welfare costs that I estimated were not based on population,





Litt, Dale, Saker, Ellwood, Burrell,  
Miller  
Or by Taves

1 they were based on need and there's a distinct difference.

2 Q Oh, okay, so my point is  
3 simply this, if there is a different figure of population  
4 which may be coming here, then may there be a different  
5 figure of that population which is in need?

6 A I don't anticipate any change  
7 in my figures as a result of revised population. It is in  
8 my view the population, secondary population, will decrease  
9 from the 42 inch, not increase, because the 48 is being  
10 built over a shorter period of time.

11 Q I'm not sure I follow that,  
12 Mr. Miller.

13 A Well, what I'm suggesting, in  
14 the 42 inch case, the construction period was considerably  
15 longer then it will be for the 48 inch case. As a result  
16 of the shorter period of time for construction, there will  
17 be less opportunity and less need for secondary population  
18 increases.

19 Q Let me put this to you, how-  
20 ever, suppose we take the summer of 1980, one particular  
21 summer. Suppose that the new figures that we're apparently  
22 going to see in July indicate an entirely different popula-  
23 tion projection than you state, then your estimates, or  
24 your assumption you make under welfare on page 10. And  
25 suppose, is it not then reasonable then to suppose that a  
26 portion of that particular increased population in the



1 summer of 1980 might indeed create an excess burden on the  
2 welfare?

3 A No, I don't think so. I  
4 think we're talking two things here, as I see it. Number  
5 one, while we have 2,300 construction workers in the Yukon,  
6 that should not impose too many more burdens on the Welfare  
7 Department.

8 Q Agreed.

9 A The population increase that  
10 will flow with those 2,300 workers, in my opinion, will be  
11 less than what would have flowed under the 42 inch case,  
12 where you had less population but a longer construction  
13 period.

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Q And this is true if we're even dealing with one particular summer. Like, instead of 1,700 there are 23 and we're dealing with a 3 month period. Are you telling me that 2,300 people up here on the pipeline using a normal multiplier, which I understand is used by most experts in this area, that the, in fact, the secondary and induced jobs and overall population increase will be less that summer than if they'd only brought up only 1,700 men.

Q Oh, I missed your point then.

A                      What I'm saying is that we're going to have, or we're talking about having 2,300 people in the Yukon as construction workers for a period of about 150 days. I don't see how those 2,300 people will have any major effect on immigration.

A                      Other than strictly as  
construction workers. In other words they are not intended  
to bring their family, there should be no in migration  
attached to it.



1 Q Well, let me ask you this  
2 then, Mr. Miller. Are you aware of what is known as the  
3 multiplier effect?

4 A Yes, I'm familiar with the  
5 multiplier effect.

6 Q Would you say that it might  
7 apply in the summer of 1980?

8 A No, I don't think it will.  
9 The multiplier effect is a general averaging provision that  
10 economists and statisticians use. And it's normally used over  
11 a period of time. It's not used at a point in time.

12 Q So, if there is going to be  
13 a zero multiplier, I gather then, as I understand the formula,  
14 the way you arrive at a multiplier, is you divide the total  
15 number of jobs created in the economy, divide it by the  
16 direct jobs actually on the pipeline. Is my understanding  
17 correct?

18 A That's the way you would  
19 calculate it, yes.

20 Q And you're stating that,  
21 that this particular pipeline project, there will be no other  
22 jobs created in the economy, because there will be a zero  
23 multiplier.

24 A I didn't say no. I said  
25 I didn't think that there would be as much impact with the  
26 48-inch as there will be with the 42.





Littledale, Saker, Ellwood, Burrell,  
Miller.

Cr Ex by Mr. Taves.

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Q Oh, so there will be a multiplier.

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A There will be a multiplier which hasn't been determined as yet.

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Q I see. Would you -- I don't suppose we'll know when it will be determined either except in July. Is that correct?

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MR. ELLWOOD: Yes

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Q Answer me this, though, Is it possible that with the multiplier determined in July that the population increase may in fact be greater than what is in 5.A, which is 1,380 people.

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A There are certain problems with using a multiplier situation for this. I'm sure you can appreciate that a construction worker flying up here to the camp and going back really has almost zero multiplier. His only real interaction with the economy here may be at the cigarette machine at the airport.

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Q The only thing I'm trying to find out, Mr. Ellwood, is whether or not the 1,380 people figure is going to be the same one that we'll see in July. And do you know if it will be the same, or do you think it might be different?

25

26

A I don't know if it will be the same. I would think it would not be all that much



Cr Ex by Mr. Taves.

1 different.

2 Q Do you think it will be  
3 higher or lower?

4 A I have no idea, we have  
5 to wait to see how it comes.

6 MR. MACKIE: I might suggest, Mr.  
7 Chairman, that the study isn't prepared yet, Mr.  
8 Ellwood has no knowledge of it at this point. It seems  
9 purely hypothetical to even ask questions about it.

10 Q I'm leaving that area now,  
11 Mr. Chairman. Mr. Ellwood, would you agree with me that in  
12 a period of boom construction often creates-- construction of  
13 a pipeline, that unemployment in fact actually rises in some  
14 instances?

15 A In some instances, yes.

16 Q I gather you are aware of  
17 that particular effect in Alaska.

18 A I'm aware that your client's  
19 consultants testified to that effect at the Energy Board, yes.

20 Q You're referring to Dr.  
21 Truskey's evidence, which I understand was your witness in the FPC

22 A I may be mistaken. Perhaps  
23 it was Dr. Truskey that testified to that.

24 Q Have you analyzed, I  
25 didn't see in 5.A but when you were doing your 5.A study, did  
26 you analyze that particular potential problem?



1 A It's really all part of  
2 the in-migration question.

3 Q That's still part of the  
4 in-migration question. Would you consider the Alaska ex-  
5 perience relevant when looking at that particular problem?

6 A Not really, because it was  
7 the difference in hiring policies from earlier practices that  
8 led to in-migration over there, and thus caused unemployment.

9 Q Do you agree that the  
10 Foothills project will have an impact or a delay on the  
11 delivery of private and public goods and services?

12 A No, I wouldn't agree with  
13 that.

14 Q The problem with these ques-  
15 tions, Mr. Ellwood is that everything we're dealing with  
16 here as I understand it is socio-economic panel is  
17 dealing with the question of population increase. Surely,  
18 that the basis of everything we're talking about here. Is  
19 that right?

20 A I agree that's a major  
21 question, it raises potential impact here.

22 Q Let me read you a quote  
23 from Mr. Privett, which I gather spoke on this particular  
24 matter before the N.E.B. He said:



1 "The potential for detrimental social impact from the  
2 pipeline construction is directly related to a magni-  
3 tude and rate of in-migration attributed to the project.  
4 If this in-migration exceeds the carrying capacity of  
5 the local infrastructure then soci-economic problems  
6 may develop."

7 Would you agree with that statement?  
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Littledale, James Burrell,  
Miller  
Cr Ex by Te

1 A Yes

2 Q So we have here a panel  
3 dealing with socio-economic problems, but one which refuses  
4 to discuss population increases? Is that correct?

5 A It is correct to say that  
6 we're not here prepared to speak to the in-migration question.  
7 We intend to address that later. There are other, as outlined  
8 in our evidence, other matters that can be discussed. Our  
9 policies and plans on this project as they relate to  
10 questions of a socio-economic nature.

11 Q Except those policies  
12 spoken to by Mr. Blair?

13 But, you agree with me, Mr. Ellwood,  
14 that the 5A study, various projected socio-economic  
15 problems that may or may not arise may be rendered completely  
16 obsolete with your -- if the particular population increase  
17 study that we're getting turns out to be materially different?  
18 all of  
18 Because, as I understand it, socio-economic problems dealing  
19 with impact on unemployment, on inflation, on housing, the  
20 things we've been talking about here today and over the week  
21 are basically based on whether or not there's an increase in  
22 the overall population? Am I right?

23 A Mr. Burrell would like to  
24 respond to that.

25 MR. BURRELL: We agree that the  
26 in-migration is an important factor and something that has



Littledale, Saker, Ellwood, Burrell,  
Miller  
Cr. Fx by Taves

1 to have a considerable look at. But I think if you go through  
2 the matters which we have talked about and addressed in this  
3 panel, employment, manpower, operating and maintenance policies  
4 and so on, I think that you'll find that these are for the,  
5 most exclusively, are not necessarily related to the in-migration.  
6 We're going to present a panel that's going to talk about  
7 in-migration, population, and spin-off effects, and certainly  
8 the evidence which will come out of that will be then open  
9 to cross-examination to raise the questions that you are  
10 discussing now.

11 Q Thank you. I'll leave that  
12 line of questioning, with just this one thought. That is  
13 that it was my impression that we did not cover employment  
14 for one --

15 A Pardon, I'm sorry, I can't  
16 hear you very well --

17 Q I'm sorry, we did not cover  
18 employment because employment to me/<sup>is</sup>inextricably tied in  
19 with secondary and induced employment which will be discussed  
20 later, because I understand that's going to be part of the  
21 in-migration panel. However, --

22 A We talked about the employ-  
23 ment policies as it relates to the construction phase for the  
24 pipeline and for the O & M phase. As I mentioned, that panel  
25 that are intending to put forward will talk about population,  
26 the spin-off, which is your secondary employment reference



Littledale, Saker, Ellwood, Burrell,  
Miller  
Cr Ex by Taves

1 and the predictions on in-migration. So I think the topics  
2 that you are referring to will be aptly covered by that panel.

3 Q Thank you.

4 I will then move on. The questions  
5 I had this morning, arising from Mr. Horton's examination,  
6 dealing with the use of the Highways, and various questions  
7 relating to the Trimac report.

8 Mr. Ellwood, I wonder if I can ask  
9 you to read to me those figures that you were going to file,  
10 if you have them with you? Regarding the traffic at the  
11 three mileposts?

12 MR. ELLWOOD: Pipeline milepost 162.

13 Q Where is that located  
14 please?

15 A Just a second, until I  
16 refer to this map over here, please.

17 162 would be just northwest of Kloo  
18 Lake.

19 Q Is that the one between  
20 Haines and Whitehorse or south of Whitehorse, or --

21 A That's north between Haines  
22 Junction and Kluane Lake.

23 Q Okay.

24 A The summer of 1979 we'll  
25 be moving 2,687 loads of material into that area. That's an  
26 average of 537 loads of material per month moving in.



Littledale, Saker, J. L. Wood, Burrell,  
Miller  
Cr Ex by Taves

1 In the winter of '79/80, there are  
2 3,977 loads of material, about an average of 796 per month.

3 Q That's the same milepost?

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Littledale, Saker, Ellwood, Burrell  
Miller  
Cr Ex by Taves

A Yes.

1 There'll be no, virtually no traffic moving into, or I  
2 should say that these figures that I've given you would be  
3 traffic that moves to either Mile Post 162 or beyond. That  
4 would be between Mile Post 0 and 162.

5 Q I see. Does that count them  
6 coming back as well?

7 A No, these are the loads, are  
8 the loaded trucks.

9 Q So if we were to count traffic  
10 on the highway, I would presume we would actually double  
11 those figures?

12 A Yes.

13 In the summer of 1980,  
14 there is no material moving up past, to or past Mile Post  
15 162. In the winter of 1980 - 81, there are 1,768 loads,  
16 an average of 354 per month.

17 Mile Post 215 on the pipeline, which  
18 is between Haines Junction and Whitehorse, Champagne and the  
19 Aishihik River. Q Would that be the one going  
20 south to Haines?

21 A Yes. The material moving into  
22 this area comes from the Haines Road and also from White-  
23 horse. So here you're having the vehicles approach from  
24 two directions.

25 Q Okay.

26 A Again, in the summer of 1979,



Littledale, Saker, Ellwood, Burrell, ·  
Miller  
Cr Ex by Taves

1 3,545 loads of material, if you were standing at Mile Post  
2 215, they would either, those loads would either come there  
3 or go past you. That's 709 per month on the average.

4 In the winter of '79-'80,  
5 there are 1,247 truckloads of material. We're there aver-  
6 aging 245 loads per month.

7 The summer of 1980, there are 2,666  
8 loads, 533 per month on the average.

9 In the winter of 1980-81, there are  
10 686 loads of material there, for an average of 137 per  
11 month.

12 Mile Post 320 --

13 Q Is this location south of  
14 Whitehorse?

15 A South of Whitehorse in the  
16 Squanga Lake area. In the summer of 1979, there are 2,523  
17 truckloads, or 505 per month.

18 In the winter of '79-'80, 422 truck  
19 loads, or 85 per month.

20 The summer of 1980, there are 2,270,  
21 for 456 per month, and in the winter of 1980-81, 185 loads  
22 of material, or 37 per month.

23 Q And each of these loads would  
24 presumably be going both ways, so you double all of your  
25 figures to get the total number of trucks.

26 A Total number of trucks involved



Littlelake, Baker, Ellwood, Burrell,  
Miller  
Or Ex by Taves

1 in the logsite haul positioning materials along the high-  
2 way.

3 Q And I gather you did that  
4 calculation by taking an average of, I think you did this  
5 morning, 27 tons per load and dividing it by the tonnage  
6 shown on the various tables on the Trimac report, is that  
7 correct?

8 A Well, I've used different  
9 average loads in there. On the pipe hauls, I've used 27.7  
10 tons per load, based on the weight of the pipe and the  
11 average length. On contractors equipment, miscellaneous  
12 materials and fuels, I've assumed 25 tons per load. Explo-  
13 sives and perishable foods, I've assumed five tons per load.

14 Q So am I right in thinking you  
15 took those three figures you just gave me, averaged them  
16 and divided them into the tonnage, or did you, do you have  
17 a set number of trucks carrying --

18 A If you look in the  
19 Trimac report, you'll see the tonnage of perishable food  
20 coming into any given area and the timeframe. I've taken  
21 those tonnages and divided by five for the number of truck-  
22 loads of perishable food.

23 Q I see.

24 A Likewise for the other  
25 materials.

26 Q It was also stated this



1 morning that you'd be using buses to transport the workers  
2 from, either from airport to camp, and I presume from camp  
3 to the location of the work everyday and back.

4 A Yes.

5 Q So, I presume if we had a  
6 camp of 700 to 800 men, which, I think, some of them are, at  
7 50 people to a bus, that would 15 buses going to work and  
8 coming back. Is that correct?

9 A Not all of the people are  
10 leaving the camp.

11 Q I would think to the location  
12 of where you're building a pipeline that particular day,  
13 it might just be a mile down the road. You would bus them  
14 there, I presume?

15 A Yes, they're bused out from  
16 the camp to where the work is going on.

17 Q Mr. Saker, would you like to  
18 add to that?

19 MF. SAKER: No, that's right, we  
20 will be busing them from the airport to the camps. We  
21 won't, the contractors will, is what it amounts to. If we  
22 have one or two camps going, then there will be the right  
23 amount of buses to transport those men to the line.

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Littledale, Saker, Ellwood, Burrell,  
Miller  
Cr Ex by Taves

1 Q Morning and evening?

2 A Morning and evening.

3 Q Right. Have you any

4 estimate on the number of crew cabs and pick-ups that your  
5 supervisory personnel will be using?

6 A About 75 at the peak.

7 Q That is 75, all of the  
8 vehicles?

9 MR. ELLWOOD: No, that's Foothills  
10 project personnel. There will also be contractor's  
11 personnel.

12 Q So whatever they are, the  
13 4 x 4's or pick-ups, 75 is the total number?

14 MR. SAKER: No, that's -- each contractor  
15 will have as many as they require, and it could vary between  
16 40 and 50 vehicles of all types, other than heavy pieces of  
17 equipment. We will have our own supervisory inspection  
18 equipment as well.

19 Q I see, your  
20 supervisory is 75, and every other contractor has 40 or 50?

21 A That's right.

22 Q How many contractors are  
23 we talking about?

24 A There would be two at one  
25 time.

26 Q Two at one time. So about



1 175?

2 A More or less.

3 MR. ELLWOOD: I make it 200, there  
4 are other miscellaneous tasks going on.

5 MR. SAKER: And remember, these  
6 aren't all at the same place. There would be two different  
7 segments of pipeline, and they could be as many as 1 or 200  
8 miles apart.

9 Q Mr. Ellwood, on page 2 of  
10 your evidence, your answer to question 3 and subanswer 4,  
11 you state that casual transportation will not be available  
12 to any construction camp workers, which this morning you  
13 stated that Foothills would not provide them with  
14 vehicles? Did I get the gist of your answer right?

15 MR. ELLWOOD: Yes.

16 Q What I'm asking is this,  
17 Can any worker drive his car to the camp if he wants to?

18 A Yes. I don't think you can --  
19 you can't stop people from driving their car to work rather  
20 than taking our aircraft, although we would not anticipate  
21 very much at that. Local residents, I certainly would expect --  
22 those will be driving. They would prefer to stay at home  
23 rather than in the camp.

24 Q But if a man brought his  
25 truck and camper up, and he wanted to work on your pipeline,  
26 you would not tell him he couldn't park in camp?



Littledale, Saker, Hill, Surrall,  
Miller  
Cr Ex by Taves

1 A Well, I would tell him he  
2 couldn't be hired here.

3 Q Pardon me?

4 A We would tell him he  
5 couldn't be hired here, if he drove up looking for work.

6 Q He would have to drive back  
7 to get hired?

8 A Yes.

9 Q The trucks -- I gather  
10 that you will be unloading at Haines Junction and will be  
11 carrying supplies from Edmonton and Calgary. Will they be  
12 travelling in convoys, or one at a time, or how do you plan  
13 this?

14 A I don't think there are --  
15 there are no plans to convoy these trucks, but we are aware  
16 of perhaps some special scheduling that might be necessary  
17 in areas. I would think these trucks, particularly on the  
18 major hauls where you are having repetitive kind of activity  
19 can be scheduled so that they don't conflict with the local  
20 traffic peak.

21 Q Is it feasible to schedule  
22 these trucks? Can you actually, once they are gone, once  
23 they leave Edmonton, can you actually determine that they  
24 won't in fact get into a convoy? How do you plan to  
25 police this?

26 A Well, there are not very



Littledale, Saker, Ellwood, Barroll,  
Miller  
Cr Ex by Taves

1 many trucks coming out of Edmonton.

2 Q Or Haines Junction say?

3 A The primary centres where  
4 the loads are put on, where the material leaves from will  
5 be Fort Nelson and Haines, Alaska.

6 Q Haines, that's what I meant.  
7 But the same question applies.

8 A Well, can we schedule them?  
9 Certainly.

10 Q Once they leave after you  
11 have scheduled them, have you any control over them?

12 A You don't have any control  
13 over them, I suppose the man can stop or he can go a little  
14 faster, but he runs on a schedule, he has to be back to pick  
15 up another load, so --

16 Q I see. When a spread  
17 encounters a muskeg area, I believe your previous evidence  
18 of your representatives was that you leap-frog the area and  
19 proceed somewhere else. Is that correct?

20 MR. SAKER: I didn't hear the  
21 beginning of your question?

22 Q I recall reading some of the  
23 testimony to the effect that when a spread encounters a  
24 muskeg area, the bulk of the spread will leap-frog to a  
25 more stable area?

26 A Well, it all depends on the





Littledale, Saker, Ellwood, Burrell,  
Miller  
Or P. H. Taylor

1 length of the muskeg. If it's a short piece we don't leap-  
2 frog. You didn't see my slides, perhaps you did, but when  
3 we put the ditch in and when we string the pipe, it's steadily  
4 strung right along. If we can corduroy, or as the pipeliners  
5 call it, rip-rap, across the muskeg we will and the pipe  
6 is hauled in across. The only time that we would  
7 leap-frog, to repeat myself, is because of the length of the  
8 muskeg. But we also plan to do most of our work where we  
9 encounter any length of muskeg in the wintertime for that  
10 particular reason, because we will then be able to travel  
11 on the frozen muskeg.

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Littledale, Baker, Hill, Ood. Burrell  
Miller  
Cr Ex by Taves

1 Q Is this testimony of the  
2 NEB, is that inactive then?

3 A No, if necessary, we will  
4 leap-frog.

5 Q Oh, I see, and I presume  
6 when that happens that you will move along the highway as  
7 well.

8 A Well, again, it all depends  
9 on the relationship of the muskeg to the highway.

10 Q It is possible.

11 A No, I think not. We would  
12 move our equipment down the right-of-way. We would walk it,  
13 as we would say.

14 Q You would walk it, you would  
15 not use the highway.

16 A That's right, we'd walk  
17 down the right-of-way.

18 Q Just walk this kind of stuff  
19 through the muskeg onto the more stable area.

20 A We could walk it around, yes.

21 Q Oh, around the muskeg.

22 A You've missed my point though,  
23 I said that if it were a long muskeg, we'd be doing it in the  
24 winter time and that's why we're doing the first three  
25 sections in the winter.

26 Q I was just wondering if you -



Littledale, Saker, Ellwood, Burrell,  
Miller  
Cr Ex by Dave

1 I gathered from your statement that you will-- I'm  
2 not sure what I gathered. I think, did you say you will  
3 never use the highway when you leapfrog in muskeg or that  
4 you may.

5 A No, we may have to, but we  
6 would avoid it because, as I say --

7 Q You avoid it if possible.

8 A Yes, that's right.

9 Q I gather also that the pipe-  
10 line tends to cross the highway at various places.

11 A That's right.

12 Q And for that do you go under  
13 the highway?

14 A It is a separate operation,  
15 we bore under the highway, yes.

16 Q And that, I think this morning  
17 you stated that there will be signs warning motorists to  
18 slow down but they won't have to stop.

19 A That's right.

20 Q In other words, a crossing of  
21 the highway by the pipe will not entail a vehicular stoppage  
22 of traffic on the highway.

23 A As much as we can prevent it,  
24 yes, the pipeline has been bored underneath the Trans-Canada  
25 Highway, which is much busier than the Alaska Highway without  
26 impeding the progress of any of the summer vacationers.



Littledale, Baker, I  
Miller  
1 Ex by Taves

1 Q Now, as I understand it, the  
2 total highway picture then will, during three summers, we'll  
3 have the various trucks, the numbers of loads per month that  
4 you have given me earlier, 175 to 200 casual vehicles of  
5 Foothills and your contractors, possibly using the highway  
6 or buses transporting workers from the camp to the location  
7 morning and evening. I presume a fair number of tourists  
8 and any workers that wish to drive to and from the work, if  
9 they're local. Is that about correct?

10 A That's the way you summarize  
11 it, yes.

12 Q Is the Alcan project that's  
13 going on in Alaska, is that happening at the same time that  
14 this particular project is? Do you envisage that?

15 A Yes, it is.

16 Q Will the-- is it reasonable  
17 to assume that some use of the Alaska Highway will be made  
18 by trucking supplies and personnel through to Alaska?

19 A I would think that it would be  
20 very limited. I don't imagine the Americans would be truck-  
21 ing up that great an amount when they could bring it in by  
22 sea much cheaper.

23 Q Have you any knowledge of the  
24 hiring practices that are proposed to be used in Alaska?  
25 In other words, will they be hiring in the lower 48?

26 A No, I'm not aware of them.





Littledale, Saker, Ellwood, Burrell, .  
Miller  
Cr Ex by Taves

1 Q If they were hiring on the  
2 project as they did on the Alyeska, would you then foresee  
3 a greatly increased use of the highway by people going to  
4 Alaska to work on that particular project?

5 MR. MILLER: I think in referring  
6 back to the Alyeska project, the major traffic flow was the  
7 trucks, it was not the transients up and down the highway.  
8 It was the truck traffic which was the noticeable flow and  
9 that truck traffic resulted not from a decision of Alyeska's  
10 to use the highway, it was forced on them by a strike in  
11 Seattle port, so it was a circumstance beyond their control.

12 Q So, what you're saying is that  
13 for the two year period, '74-'76, with the increase of  
14 100,000 people, there was no noticeable change in traffic  
15 on the highway, they presumeably came in by boat or by  
16 airplane.

17 A They either flew in or went  
18 up on the ferry, that's right. There was probably some  
19 went up the highway, I'm not saying they didn't, but there  
20 was no noticeable increase in traffic.

21 Q And you would not, then you  
22 would presumeable would foresee the same thing for the Alcan  
23 project?

24 A I wouldn't expect it to be any  
25 different.

26 MR. ELLWOOD: Just to add something



1 on that, Page 5(a)4.53 of the application document, there's  
2 some traffic count summary statistics for the years 1972 to  
3 1975 for various points along the Alaska Highway.

4 Q I'm sorry, Mr. Ellwood, what  
5 page is that?

6 A It's document 4(1), page 4.53.

7 Q Thank you.

8 A That, as you can see, there  
9 is some '75 data in there which is, although not complete  
10 for the period of Alyeska construction, there are, there  
11 were some in-migration to Alaska during that period. The  
12 traffic count statistics there were up and down from the  
13 previous years. There doesn't appear to be any noticeable  
14 or marked effect.

15 Q I see, May-August, '75,  
16 24,000. May - August '74, 9,000?

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1  
2 A At Milepost 630 which is  
3 down in the Watson Lake area, there was a decrease in traffic  
4 in 1975 in the average monthly counts.

5 Q Where is milepost 158? Do  
6 you know?

7 A Milepost 158?

8 Q Yeah.

9 A That's on the Haines Highway.

10 MR. MILLER: It is just south of Haines Junction.

11 MR. TAVES: I have no further questions  
12 at this time. Thank you.

13 MR. CHAIRMAN: Thank you, Mr. Taves.  
14 Mr. Goudge, who is next on the list?

15 MR. GOUDGE: Me, Mr. Chairman. I'm  
16 quite prepared to begin and carry on as long as you want?

17 MR. CHAIRMAN: I think ten minutes  
18 worth is about as long as we want to take.

19 MR. GOUDGE: I would prefer to start  
20 if it's all the same to you.

21 MR. CHAIRMAN: This would also be  
22 a convenient time, Mr. Goudge, to tell us what's proposed  
23 for start-up time, Monday, and what the order of business  
24 will be. Will it be a continuation with this panel or  
25 something else?

26 MR. GOUDGE: Sir, I met just after



1 the lunch break with Counsel, and the representatives for  
2 the parties and what we would propose, subject to what the  
3 Board thinks is this: That we would begin Monday morning,  
4 sharp at 10. We may, I might have to ask you to begin  
5 earlier than that as the week moves along, we will begin  
6 with the CYI, they will be presenting a policy statement. we  
7 will follow that with Mr. Templeton and his panel who will  
8 be available for cross-examination. I would anticipate, sir,  
9 that because of our work load, I may be asking that we sit  
10 Monday evening. If we do that, then sit on Tuesday, I think  
11 we shall be able to complete Mr. Templeton's panel. Wednesday,  
12 Thursday and Friday will be dealt with with this evidence, if  
13 it suits you. The order may have to be juggled, but basically  
14 it will be the continuation and completion of the cross-exami-  
15 nation of the gentlemen before you. The presentation of the  
16 Nortran panel by Foothills and it's cross-examination, and  
17 the presentation of a number of briefs by four or five  
18 organizations that have been intervened in the formal  
19 hearings, such as the Chamber of Mines, the Association of  
20 Municipalities and the City of Whitehorse, the Chamber of  
21 Commerce.

22 I'll be arranging the detail of  
23 that schedule over the week-end and on Monday. That would  
24 take us through until next Friday at the end of the day.

25 We as well, of course, will be  
26 commencing our informal hearings, our community hearings





1 in Whitehorse next Wednesday evening, and I would obviously  
2 be anxious for any who are here, and who wish to make  
3 submissions at those informal hearings, to be in touch with  
4 me so that we can arrange for a batting order on Wednesday  
5 evening, and I have no doubt there will be many others who  
6 will want to come on Wednesday evening as well.

7 So that, 'sir, in a nutshell is the  
8 busy week, starting Monday.

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Littledale, Saker, Ellwood, Burrell,  
Miller  
Cr Ex by Goudge

1 MR. CHAIRMAN: Thank you, Mr.

2 Goudge. Would you carry on then?

3 CROSS-EXAMINATION BY MR. GOUDGE:

4 MR. GOUDGE: Let me begin, Mr.

5 Littledale, with one or two questions for you, sir. If I  
6 could ask you to look very briefly at your prepared evidence,  
7 the first page of it. If I understand correctly, you  
8 refer there in the last paragraph of the first page to  
9 positions which are part of your operations and maintenance  
10 program, carpenters, automobile mechanics, plumbers,  
11 electricians, fabrication welders, equipment operators,  
12 pilots and secretaries:

13 Do I understand correctly that  
14 those positions are part of your operations and maintenance  
15 program?

16 MR. LITTLEDALE: Yes, in the  
17 initial general plan, they are. Again, none of this is sort  
18 of cast and irrevocable. We may make minor alterations.

19 Quite frankly, on a pipeline you  
20 don't find say, in G & M, the position of carpenter, one  
21 that is really that useful and it may well be that we may  
22 change that slightly and contract that type of work out.

23 Q I wondered if that was the  
24 individual who was driving the spikes into the pipeline. I  
25 take it not.

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Littledale, Saver, Willowood, Burnaby  
File  
Ex by Goud

1 Q You put your finger, though,  
2 on something which interested me, because I compared that  
3 very briefly with the list of job classifications in your  
4 application that relate to the operation and maintenance  
5 phase, and there were several in the list on page one of  
6 your evidence that I couldn't find in your application.

7 It's at page 5(a)1, 2, 3, I think.  
8 If you could just look at that, sir? Is that in front of  
9 you, sir?

10 A Yes, Mr. Goudge, go ahead,  
11 yes.

12 Q And I looked for carpenters  
13 and couldn't find any. I looked for plumbers, electricians,  
14 and pilots and couldn't find any. The reason it concerned  
15 me was that that led me to believe that work would be  
16 contracted out as part of your operations and maintenance  
17 program and would have a consequent employment effect?

18 A Yes, I think we talked about  
19 that, Mr. Goudge, about contracting out the aerial patrol,  
20 that kind of thing.

21 Q Yes, and I take it --

22 A And in the statement here  
23 in the prepared evidence, I believe, Mr. Goudge, that you  
24 know, when we're talking about such things, we're sort of,  
25 in that, it was not intended to sort of reflect the people  
26 that would be, types of jobs that would be available just, you



Littledale, Saker, Hillwood, Burrell, .  
Miller  
Cr Ex by George

1 know, on O & M staff per se, but people that would be used by  
2 O & M.

3 Q So that every operations  
4 and maintenance facility would have on call people with  
5 those skills, if not, on staff?

6 A Yes, frankly, we don't  
7 require plumbers, we require pipefitters on O & M. Plumbers,  
8 we would contract out. They would be plumbers in the  
9 straight sense, would be the people that would plumb  
10 company housing and things like that, or that sort of thing,  
11 but, again, it was intended that this is the sort of type  
12 of jobs, that O & M would either have on staff or be  
13 utilizing.

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Littledale, Saker, Ellwood, Burrell,  
Miller  
Or ix by Coudge

1 Q Would each service centre have  
2 to have access to these kinds of skills, albeit not on staff,  
3 but available to be retained ad hoc?

4 A Yes, I would say that's a --

5 Q So that when we deal with  
6 your number on staff for each service centre, which is 22,  
7 I think, we should notionally add to it several positions  
8 to deal with the ad hoc contractor that will be supplying  
9 your plumbing and electrician skills? Is that fair?

10 A Yes, and carpenters would be-

11 Q So that each service centre  
12 carries with it an employment package of, what, 30 as  
13 opposed 22?

14 A Well, when you get into the  
15 ad hoc businesses, I'm not sure that that's a fair way to  
16 throw it in there, you see. It wouldn't, you know, these  
17 people may not be employed, these additional ad hoc people  
18 continuously. The 22 people we would envisage as people  
19 that would be employed, you know, year round and where these  
20 other ad hoc people would be employed at certain times of  
21 the year.

22 Q It's fair to say, though, that  
23 the employment package, if I could put it that way, involved  
24 with each service centre, is something more than 22, albeit  
25 the attachments being on an ad hoc basis.

26 A Yes, I would say that's very,



Littledale, Saker, Ellwood, Burrell  
Miller  
C. P. by Counsel

1 very much so, yes.

2 Q Dealing with your service  
3 centres, Mr. Littledale, I was interested that along the  
4 500 miles in the Yukon Territory you have five service  
5 centres, is that right?

6 A Yes, I believe that's correct.

7 Q Beaver Creek, Haines Junction,  
8 Whitehorse, Teslin, Watson Lake.

9 A Yes.

10 Q I'm interested to know whether  
11 that's a function of technology or whether it's a product  
12 of any other factors? Do you have to have a service centre  
13 every hundred miles or could that be altered?

14 A No, it's not a function of  
15 any technology, it's more a function of experience and,  
16 giving yourself coverage. For instance, you know, you put  
17 these service centres in at these locations to take care of  
18 your regular maintenance, plus you put such considerations  
19 as the distances involved. You wouldn't want to put them  
20 too far apart because you'd have too far a distance to go  
21 to maintain certain equipment and, you know, a lot of your  
22 time would be sort of taken up in travelling. Also, there  
23 would be a problem in regard to the type of surveillance  
24 and security you would want to give the line, so, it's an  
25 experience type of judgement that determines the intervals  
26 at which you locate these bases.



51  
Littledale, Baker, Ellwood, Burnett  
Mills  
Cr Ex by Goudge

1 Q Is the experience roughly  
2 100 miles for service centre in southern Canada, is it?

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Little, Dale, Baker, Ellwood, Burrell;  
Miller.

Cr Ex by Mr. Goudge.

1                   A           If there is all over  
2 really, Mr. Goudge, I couldn't give you as a figure of an  
3 average of 100, I would have to, so much depends on the type  
4 of terrain, the type of system that you are running, the  
5 number of facilities that you have and so on. And for, each  
6 pipeline system has its own needs, requirements and pecu-  
7 liarities, and I would say, I just couldn't say that there  
8 is such a thing as an averaging spacing for these centers.

9                   Q           And there is nothing  
10 immutable about one service center per 100 miles, and no  
11 reason why you might not contemplate 4 or 3 service centers  
12 should other factors dictate that sort of arrangement.

13                  A           Well, theoretically, I  
14 suppose you can talk that way. But what happens, and what  
15 we found is that when you start stretching it beyond that  
16 point, and the 100 miles, you are really looking at sort of  
17 50 miles from each way. And quite frankly, you are going to,  
18 just for no other consideration, one of the considerations  
19 which is an important one, if you are going to do any work  
20 at all and those people are going to go back to their homes,  
21 to their regular homes, if you travel 100 miles out of the  
22 day to the site where you are going to do the work, you've  
23 knocked a big chunk out of the working day. So, then, if  
24 you're going to come to these kinds of distances, then you  
25 have to look at, well, moving in sort of a temporary camp  
26 while you do your work, or else, are looking paying a great





Littledale, Saker, Ellwood, Burrell,  
Miller.

Cr Ex by Mr. Goudge.

1 deal of travel time, so that, you know, you don't sort of  
2 travel 6 hours out of the day, and work 2 hours out of the  
3 day. This is the sort of considerations.

4 Q The reason I raised that  
5 is that obviously, there may be individual circumstances,  
6 individual locations, where a service center would have the  
7 kind of impact on the community that might be too substan-  
8 tial to permit it to be located there. Let me work through  
9 with you one example, you've contemplated a service  
10 center at Beaver Creek.

11 A Yes.

12 Q This may be the blind  
13 leading the blind, Mr. Littledale, but let me go through  
14 a little mathematics with you, and ask you to accept my  
15 assumptions. The population of Beaver Creek is roughly  
16 146. If you assume 22 jobs in your service center at Beaver  
17 Creek, and you use a multiplier of 1.5 for secondary employ-  
18 ment generation, that results in 55 jobs created in the  
19 Beaver Creek area as a result of your service center. And  
20 if you add to that a family multiplier of 2.3, that is 2.3  
21 persons for each job created, you've got a population addi-  
22 tion to Beaver Creek as a result of your service center of  
23 roughly 127 people. So that you come close to doubling the  
24 size of a very small community by inserting your service  
25 center there. Now if it should be determined that that impact  
26 was for any reason unacceptable, I think that technology



Littledale, Saker, Ellwood, Burrell,  
Miller.  
Cr Ex by Mr. Goudge.

1 would permit you to operate without that service center.

2 A Yes that would be true  
3 Mr. Goudge. Again, you know, the only thing that I can offer  
4 you is our experience. We can take a northern community in  
5 the south, let's take one as McLeod Lake. McLeod Lake is  
6 a very small settlement on the highway, quite remote, and we  
7 built a complex station, and we had approximately 20 families  
8 located, 20 jobs, there are 22 located there, and I believe  
9 the population of McLeod Lake, when we did that was in the  
10 neighbourhood of about 15 to 17 families.  
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1 We never did run into a sort of  
2 a problem, the community just expanded by that much and over  
3 a period of time, other little businesses came in and we  
4 never sort of saw it as a coming in as a disruptive element.

5 Q Let me finish with this  
6 line of question, sir, and then perhaps we can stop with one  
7 last question. Mr. Burrell, have you conducted any studies  
8 or perhaps Mr. Ellwood, have you conducted any studies or  
9 would you contemplate any studies of the impact of your  
10 service centres on the communities where you propose to  
11 locate them?.

12 MR. BURRELL: We have certainly  
13 been into the communities and we've had good reception. In  
14 Beaver Creek, for example, and all communities, it's not  
15 fair necessarily to say that you would have all 22 positions  
16 filled by outsiders, because many of those positions that we  
17 are talking about could be filled by local people, but  
18 interestingly enough as a sidelight, we were in Beaver Creek,  
19 people came up to us and said that  
20 if we'd get them a post office, they'd vote for our pipeline.

21 Q What'd you say?

22 A We took the lawyers way out  
23 and reserved judgment.

24 Q I take it, though, you have  
25 not got studies on the drawing boards that are of a more  
26 specific kind?



based upon the experience that Mr. Littledale has talked about  
and so on we're not anticipating any problems.

As I say, we have been to the  
communities on a number of occasions and talked to a number  
of people. Not everybody, granted, but certainly the  
reception we got in the communities was very favourable in  
our opinion.

Q Thank you. I'll conclude  
there if I might. I do have a few more questions.

MR. CHAIRMAN: Thank you, Mr. Goudge.

Yes, I think it's a good idea to  
wind up now for those who have to catch the aircraft. It  
may be that Friday the 13th is not a good day to press one's  
luck, so we'll adjourn now until 10 o'clock on Monday.

Thank you.

PROCEEDINGS ADJOURNED

343.093 Alaska Highway  
A47F58 Pipeline Inquiry  
Vol. 3

AUTHOR

May 13, 1977

Vol. 3

DATE

HOFFAUER & NAME

0027

JUN-21-1977

Gibson

343.093  
A47F58  
Vol. 3







ALASKA HIGHWAY PIPELINE INQUIRY

IN THE MATTER OF AN APPLICATION BY FOOTHILLS PIPE LINES  
(YUKON) LTD. TO THE MINISTER OF INDIAN AFFAIRS AND  
NORTHERN DEVELOPMENT FOR A GRANT OF THOSE INTERESTS IN  
THOSE AREAS OF TERRITORIAL LANDS IN THE YUKON TERRITORY  
AS MAY BE NECESSARY FOR THE CONSTRUCTION AND OPERATION  
OF THE SAID NATURAL GAS PIPELINE AND THE WORKS AND  
FACILITIES CONNECTED THEREWITH AND INCIDENTAL THERETO,

AND

IN THE MATTER OF A BOARD OF INQUIRY ON THE SOCIO-ECONOMIC  
ASPECTS OF AN ALASKA HIGHWAY GAS PIPELINE.

BEFORE THE BOARD

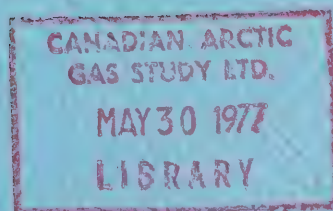
K.M. LYSYK, Esq., Q.C. CHAIRMAN

WILLARD PHELPS, Esq. MEMBER

MRS EDITH BOHMER MEMBER

PROCEEDINGS

VOLUME IV



WHITEHORSE, Y.T.

MAY 16, 1977





E R R A T A

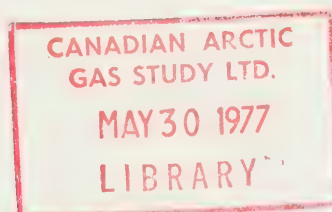
Page 499 lines 21 and 23

Truskey should be Kresge.



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Whitehorse, Y.T.  
May 16th, 1977

1  
2 PROCEEDINGS RESUMED PURSUANT TO ADJOURNMENT.

3 R. GOUDGE: I think, Mr. Chairman,  
4 members of the Board, we are prepared to begin. Before we  
5 begin with the presentation I spoke about on Friday, Mr. Joe,  
6 for the Yukon Council of Indians, Mr. Hollingworth has one  
7 short statement that I think he wants to make to the Board  
8 about the new map that he has got.

9  
10 MR. HOLLINGWORTH: Mr. Chariman,  
11 members of the Board, the other day I mentioned the fact that  
12 we would mount another wall map, over to my left, showing  
13 the proposed pipeline route in more detail. That map is now  
14 up and I would like to have it made as an exhibit to this  
15 Inquiry.

16 MR. GOUDGE: I think it could be  
17 marked, then sir. Now I would ask Mr. Joe to introduce the  
18 panel before you speak for the CYI this morning. Mr. Joe?

19 MR. JOE: Yes, Mr. Chairman, this  
20 morning we have the policy panel of the Council for Yukon  
21 Indians. On your immediate left is Mr. Grafton Njootli who's  
22 the Vice-President for the Council for Yukon Indians, and he's  
23 a member of the General Assembly of the Council for Yukon  
24 Indians and a Board member from Old Crow in that respect,  
25 and seated next on Mr. Njootli's left is the Chairman of the  
26 Council for Yukon Indians, Mr. Daniel Johnson. Mr. Johnson  
is from the Burwash area, and as such, he has been elected



1 from the Burwash area to represent the Burwash Indian people  
2 on the General Assembly of the Council for Yukon Indians, and  
3 he is the Board member from the Burwash area.

4 MR. DANIEL JOHNSON: Sworn

5 MR. GRAFTON NJOOTLI: Sworn

6 MR. CHAIRMAN: Thank you Mr. Joe  
7 Mr. Njootli will speak first.

8 MR. NJOOTLI: Can I start now?

9 MR. CHAIRMAN: Yes, whenever you are  
10 ready please.

11 MR. NJOOTLI: Mr. Lysyk, I would like to thank  
12 you for giving me this opportunity to present to you some  
13 background information. By way of an introduction, I will tell you  
14 what the Council for Yukon Indians is designed to do and as  
15 well, I will tell you some of the history of the Yukon Indian  
16 people; both of these, I am certain will assist you in under-  
17 standing the probable impact this very large construction  
18 proposal that you have before you, will have on our people.

19 The Council for Yukon Indians consists  
20 of approximately 6,000 Indian people who live in the Yukon  
21 Territory. The Council for Yukon Indians has been set up to  
22 represent the Indian people of the Yukon to settle their land  
23 claims.

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Mjootli, Johnson  
In Chief

1                   The Indian people of the Yukon have never  
2   ceded   or surrendered their lands, and they have never  
3   signed a treaty with the Government of Canada. The Council  
4   for YuKon Indians consists of both registered and non-registered  
5   Indians. The Council for Yukon Indians consists of twelve  
6   main Indian communities in the Yukon Territory. Every  
7   community elects five persons to the General Assembly. The  
8   General Assembly is responsible for making all the major  
9   policy decisions for our organization. One of the five  
10  members elected to the General Council from each community  
11  is elected as a Board Member and it is these people who are  
12  responsible for carrying on the day to day administrative  
13  affairs of our Organization, as well as carrying out the  
14  direction and policies of the General Assembly.

15                   From this twelve-member Board of  
16  Directors, there are four persons elected to the Executive  
17  positions of Chairman, Vice-Chairman, Secretary and Treasurer.

18                   The Council for Yukon Indians was  
19  formed on November 15th, 1973 to negotiate a land claims  
20  settlement based on their aboriginal rights in the Yukon  
21  Territory with the Government of Canada.

22                   The Council for Yukon Indians  
23  represents all people of Indian ancestry, as I mentioned  
24  previously, regardless of status under the laws. To ensure  
25  that as many Indian people as possible are informed of the  
26  Council for Yukon Indians' activities, we have included the



Njootli, Johnson.  
In Chief

1 Presidents of both major Indian organizations, the Yukon  
2 Native Brotherhood representing status Indian people and  
3 the Yukon Association of Non-Status Indians representing  
4 non-status people as ex-officio members of the General  
5 Assembly.

6 The organization, the Council for  
7 Yukon Indians, is specifically mandated to define the  
8 aboriginal rights that the Yukon Indian people have in the  
9 Yukon Territory and to define and settle our relationship  
10 with the Government of Canada.

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Njootli, Johnson  
In Chief

1 The Counsel for  
2 Yukon unions began negotiation as early as 1973 and we are  
3 today still negotiating with the Federal Government of  
4 Canada.

5 There has been -- there has not  
6 been an agreement in principle to date and this is what we  
7 are presently working to achieve. I will now tell you some-  
8 thing of the history of Yukon Indian people, our understandings  
9 that we as indigenous people of this land have lived here  
10 for many thousands of years. In the Yukon, we do not live  
11 in large tribes such as those in the south or along the  
12 Coast.

13 We lived in the area which has one  
14 of the harshest climates in the world where winter temper-  
15 atures are regularly colder than forty below zero. We had  
16 almost no readily available abundant sources of food so we  
17 travelled in small family groups of ten to fifteen persons.  
18 We came together in larger groups up to several hundred for  
19 trading and potlatches as our established summer fish camps.

20 We require a lot of land to move  
21 around and to ensure our survival. If we had tried to live too  
22 long in one area, we would have starved for having depleted  
23 our resource supply for our economy was based on renewable  
24 resources.

25 Before 1840, the central Yukon was  
26 used only by Indians and we know this because our elders had



Njootli, Johnson  
In Chief

1 told us these things. Tlingit Indians from the Coast,  
2 supplied Russians with furs by crossing the mountains  
3 separating us from the Pacific, white traders came in later  
4 and after this change, our land use patterns began to shift.

5 Periodic famines, the movement of  
6 Caribou out of the southern Yukon in the late 1800's, their  
7 replacement by the moose and the arrival of the resident  
8 traders all lead to changes in our patterns of land use, but  
9 although our headquarters shifted, all of the land had to be  
10 used and was used. In order that you may better understand  
11 the geography of the Yukon, we have prepared a map for you  
12 and this map is here with us today and it is put up for all  
13 of you to see. The map is to my left.

14 We have divided what is now the  
15 Yukon, into four general areas as shown on the map, the north,  
16 the southwestern, the central western and the eastern. The  
17 black line separating the four regions, green marks, the  
18 traditional village sites; the blue marks, the present day  
19 villages; the brown represents the proposed pipeline routes;  
20 green with a red circle represents traditional village sites  
21 which are temporarily used.

22 The northern area was used by the  
23 Old Crow and Fort McPherson people.

24 The southwestern area now consists  
25 -- contains the Villages of Burwash, Haines Junction,  
26 Champagne/Aishihik, Whitehorse, Carcross and Teslin. The



1       ancestors of these people used all of the land in this  
2       general area, with the exception of St. Elias Icefields.  
3       In order to stay alive, our ancestors carefully harvested  
4       the land from the river basins to the upper ranges of the  
5       mountains. Well-worn trails linked the rivers, lakes and  
6       trading centres. As in all parts of the Yukon, a detailed  
7       knowledge of the land was essential for survival.

8                       In the Nineteenth century, our use  
9       of the land in the southwestern area was greatly influenced  
10      by trade with the Coastal Tlingits. Early villages like  
11      Hutshi, Aishihik, Neskatahin and Dalton Post are mostly  
12      abandoned. They were at one time, major trading centres  
13      and summer headquarters for our people.

14                      There are a number of villages on  
15      the lower Alsek prior to an epidemic in the mid 19th Century  
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1                   In the Kluane region, people lived  
2 on the Nisling, White and Kluane Rivers, moving as far east  
3 as the Yukon River.

4                   The early pattern for many of these  
5 people was to live at fish camps during the summer, move to  
6 hunting grounds in the fall, trapping through the winter, and  
7 coming together at trading camps in the spring.

8                   Archaeologists working in this region  
9 estimate that families in the White River area used  
10 approximately 10,000 to 12,000 square miles following Century-  
11 old trails.

12                  The Lake Arkell, or Kusawa and Takhini  
13 River areas were also extensively used. No settlements  
14 remain at either Lake Lebarge, at the head of Lake Lebarge,  
15 was a major camp for many families in this area of the Yukon.  
16 It is now abandoned. Upper Lebarge where cremation was  
17 practised is sacred. This is near Mile 11 on the Mayo Road.

18                  Because of their position as middlemen  
19 in the Indian trade, the people whose descendants now live at  
20 Teslin and Carcross had a more regular seasonal pattern of  
21 life than people living further east. The lands used by them  
22 extended into what is now British Columbia. The Central  
23 Western area contains most of the Yukon River drainage north  
24 of Lake Lebarge to the Alaskan Border. This waterway was  
25 used by the ancestors of the people living today in the  
26 Villages of Dawson, Pelly and Carmacks Prior to the Goldrush,







Njootli, Johnson.  
In Chief

1 there were major concentrations of people at the mouth of  
2 the Klondike, mouth of the Pelly and numerous fish camps  
3 along the river system. However, the use of the land went  
4 inland from the river, and the trade routes often ran at  
5 right angles to the river. For example, there are people on  
6 the Klondike, traded west to the Tanana and White Rivers,  
7 and north to the Peel.

8 At Fort Selkirk, they traded south to  
9 Hutshi and Aishihik and from Tatchun Creek, southwest to  
10 Aishihik.

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Njootli, Johnson  
In Chief

1                   Like their neighbours to the south  
2 and west, the Indians of the Fort Selkirk area came together in  
3 the summer at fish camps and then spread out to hunt caribou and  
4 moose in the fall. During the winter, they moved as little  
5 as possible and relied on fish they dried in the summer along  
6 along with the occasional moose. Living further inland, their  
7 land use patterns were less governed by Tlingit trade than  
8 their neighbours. Hunting territories overlapped and were  
9 not as rigidly defined.

10                   The Eastern area includes the eastern  
11 drainage of the Yukon River and the Upper Mackenzie drainage  
12 including the Liard. Decendents of the people living in  
13 this area now live in the Village of Upper Liard and Ross  
14 River. Their annual hunting and fishing patterns were  
15 similar to the other Yukon Indians, except that they had  
16 less opportunity to catch salmon. Because they lived further  
17 inland, they were less influenced by trade with the Coastal  
18 Indians to the east and south, as well as to the west of the  
19 Mackenzie.

20                   Our history in relation to our land  
21 use should tell you that well before the arrival of the  
22 Whiteman in the Yukon, our ancestors needed and used all of  
23 the land to survive and flourish. They harvested the  
24 resources in such a way that the resources of supply never  
25 dried up. They worked with nature, not against her. Many of  
26 our people today do not want to go back to the old ways -



Njootli, Johnson .  
In Chief

1 they were very hard - but we believe we can plan a future  
2 that will not depend upon destroying the basis of our culture.

3 Later on, it will become clear to you  
4 why we have taken such a strong position in relation to the  
5 traditional areas of the Old Crow Indian people. The  
6 Council for Yukon Indians have always supported the position of  
7 Old Crow Indian people and when they made their presentations  
8 to Judge Berger in June of 1975, the Council for Yukon  
9 Indians were allowed to see and hear the history of the Old  
10 Crow people, their love for their land, their dependence  
11 on Crow Flats and the Porcupine Caribou herd, their need  
12 to use the Porcupine drainage, their pride in their past,  
13 and their frustrations with the Government and other  
14 Whiteman projects. Most of all, they expressed to Berger,  
15 their fear for their future. Our position on pipelines,  
16 being complete opposition to a pipeline anywhere near Old Crow  
17 or along the Dempster Highway will be continued.

18 The past developments in the Yukon  
19 Territory have had a large impact on the social cultural  
20 structure of the Yukon Indian people. The Yukon Indian  
21 people's first exposure to outside influence was through  
22 the Coastal Indians. This exposure introduced trapping for  
23 trade to the ancestors of the Indians who live in the  
24 Yukon today. Their introduction of such objects as metal  
25 knives, pots and guns affected the economic structure of  
26 the Yukon Indian people and as a consequence, the Coastal



Njootli, Johnson.  
In Chief

1 Indians affected the Yukon Indian people by taking back some  
2 of the Yukon Indian women with them upon their returns from  
3 their trips as well as taking large amounts of interior  
4 fur for the small items which they traded.

5 Next came the White trader. This  
6 disrupted the socio-economic cycle of the Indian people in  
7 that they moved their headquarters to the trading post of  
8 the White fur-trader. Commercial fur-trading, once secondary  
9 to hunting, began to control the lives of the Yukon Indian  
10 people. The Indians became bound to a European fur market  
11 over which they had no control. Three of our present twelve  
12 Indian Villages, began as Trading posts - Ross River in  
13 1903, Burwash in 1904, and Teslin also in 1904. Then came  
14 the White missionaries, who came to save our souls and develop  
15 the spiritual life of the Indian people. The missionaries  
16 were fairly successful in dismantling the culture of the  
17 Indian people here.

18 The pipeline proposals presently  
19 before you are not the first large scale developments that  
20 we have encountered. Our first major contact with non-Native  
21 people occurred during the Klondike Goldrush when 30,000  
22 people who were primarily American, descended on Dawson City,  
23 in the Yukon Territory. In the Council for Yukon Indians'  
24 Berger's presentation in August of 1975, we stated that:

25 "The Goldrush had a devastating impact on the  
26 people living near the Klondike and all along  
the entire route. Many died from the diseases







Njootli, Johnson.  
In Chief

1 brought by the Whiteman. Many left the bush  
2 to work at what turned out to be a temporary  
3 job. Many of the Whitemen relied almost  
4 completely on the Indian packers and guides,  
5 without whom, they would have never reached  
6 the Klondike."  
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Njootli, Johnson.  
In Chief

1                   The prospectors and gold seekers left  
2 as quickly as they came, leaving our people to cope with  
3 epidemics, loss of land, cultural dislocation and no control  
4 over an economical and political destiny which was not of their  
5 making or choosing. In presentation on September 27, 1976 to  
6 the National Energy Board in Whitehorse, our Chairman,  
7 Daniel Johnson, discussed the impact of the Goldrush and  
8 he stated in his submission there, that:

9                   "But like future White developments, the Goldrush  
10 was soon over. By 1910, most had left and our  
11 ancestors were left with the difficult adjustment  
12 to an unfamiliar social, economic way of life.  
13 By 1902, the disruption to Indian people had  
14 become so acute that Chief Jim Boss of Lake  
15 Lebarge, wrote to Ottawa for a Treaty so the  
16 survivors of his people could be protected.  
17 He asked for a land claims settlement in 1902  
18 from the effects of the Goldrush".

15                   This type of impact from large scale  
16 development explains why the Council for Yukon Indians in  
17 1975 said; Land Claims first, then we'll talk about pipelines.

18                   Large scale development of the Yukon  
19 did not stop with the Klondike Goldrush. In 1943, the  
20 Canadian and American Governments decided that the Alaska  
21 Highway was a necessity. The population of Whitehorse  
22 skyrocketed from 300 people to 40,000. Our people are  
23 still suffering from that impact. The term 'social impact'  
24 may be relatively new, but the disease, alcoholism,  
25 family break-up, violence and despair suffered by our people  
26 began long ago and continues today. What non-Native Yukoners



Njootli, Johnson  
In Chief

1 see as progress, we see as destruction of our values and  
2 our way of life. There have been many other projects in the  
3 Yukon Territory, such as the Aishihik Hydro Power Project,  
4 the Anvil Mining Project, and the construction of the  
5 Dempster Highway. Each of these have prejudiced our  
6 position in respect to Land Claims' settlement. There were  
7 assurances given from many of these developments that our  
8 rights would not be prejudiced in any manner, however, we  
9 have learned otherwise. This is why we now hold our  
10 present position, and that we will not jeopardize our rights.  
11 We will not jeopardize our rights in respect to a Land Claims  
12 settlement until these matters have been settled and  
13 implemented.

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Njootli, Johnson  
In Chief

1 We have said this many  
2 times and we will say it again that we as Indian people,  
3 realize that there are some token benefits that we can take  
4 advantage of through pipeline construction, however, these  
5 token benefits are not enough to outweigh the prejudicial  
6 effect a pipeline would have on our people.

7 We fear the impact of large scale  
8 developments, even after our land claims are settled and  
9 implemented. The past experiences that I have conveyed to  
10 you and the present evidence of modern developments are why  
11 we insist on the settlement and implementation of our land  
12 claims before any large scale development takes place.

13 I would like to stress that this  
14 position of pipeline opposition until we have our land claims  
15 settled and implemented is not one of tactics of negotiation  
16 or a desire to settle our claim while the development  
17 pressure is on, but rather, it is for the survival of our  
18 people.

19 This position that I have conveyed  
20 to you today, has been conveyed to Judge Berger by Elijah  
21 Smith, Past Chairman of the Council for Yukon Indians at  
22 Yellowknife hearings and to Judge Berger in his formal  
23 community hearings in Old Crow in July of 1975 and have been  
24 conveyed by the Council for Yukon Indians to Judge Berger  
25 on his visit to Whitehorse in August of 1975.

26 We have reiterated this position





Njootli, Johnson  
In Chief

1 to the National Energy Board on two occasions -- On September  
2 27th, 1976, and again on March 4, 1977. We understand that  
3 there are international implications of this position. As a  
4 consequence, our Chairman made a trip to Washington on March  
5 17th, 1977 to present this same position to the Sub-Committee  
6 on Insular Affairs and Public Lands.

7 Socio-economic hearings, it was  
8 with mixed feelings that we decided to participate in the  
9 socio-economic hearings which you are presently holding now.  
10 As early as 1975, we requested the Government of Canada to  
11 assure us that if the Alcan Route was to be considered a  
12 viable one, then we would like the assurance that they would  
13 hold public hearings in the vein of the Berger Hearings  
14 along the Alaska Highway communities.

15 Instead of giving us this assurance,  
16 the Government of Canada spoke proudly of the Berger prece-  
17 dent, as they called it, and said surely this is the day and  
18 age of the Berger Inquiry; you do not expect that we will  
19 overlook the Yukon communities, if in fact the Alcan becomes  
20 a viable route.

21 Approximately four months before  
22 the decision has to be made by President Jimmy Carter on  
23 which route joint Governments wish the pipeline to be built,  
24 we now find that the Government of Canada is in fact, holding  
25 a socio-economic hearing in the Yukon Territory for a period  
26 of eight weeks. Approximately three weeks before the announ-



Njootli, Johnson  
In Chief

1 cement of the socio-economic hearings, the Council for Yukon  
2 Indians was funded to research the impact.

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1                               The Pipeline Company, Foothills,  
2 has not had ample time to research their impact studies. We  
3 feel that the research of Foothills is such that it has not  
4 considered, well enough the impact upon the socio-economic  
5 system and cycle of the Yukon Indian people.

6                               Instead, in the eight week period,  
7 The Government of Canada expects us to put forward a re-  
8 searched and a detailed position on what we feel the socio-  
9 economic impact will be upon our people. It is absurd to  
10 think that the Government who has set up the Berger Commission  
11 is now insisting of all of the people in the Yukon that they  
12 participate in the socio-economic hearings which you are  
13 presently heading.

14                              It is also absurd to think that this  
15 same Government who never gave us this assurance of commu-  
16 nity hearings has now decided to hold socio-economic hearings  
17 for a period of eight weeks. Such short notice on such  
18 little preparation on such little research can be termed  
19 nothing but "whitewash".

20                              Maybe at this point in time you would  
21 like to know what the term "whitewash" as I explained it.  
22 My definition of "whitewash" would be that, for instance the  
23 Old Crow people had two months for preparation for the Berger  
24 hearings, and that the Government has given nine communities  
25 along the Alcan route to prepare within the eight weeks  
26 period, which is a large difference.



1                   We are distressed and dismayed at the  
2     attitude of the Government of Canada on what we feel to be  
3     the central issue, the only issue and that is survival of  
4     our people in relation to the accompanying impact of a large  
5     scale development like the construction of the Alcan Pipeline.  
6     We object strontly to the manner and the time frame in which  
7     the socio-economic hearings are held.

8                   All you, as Commissioners of the  
9     Socio-Economic Hearing, will be able to accomplish, we fear,  
10    is to get a superficial view of what possible impact a pipe-  
11    line may have. The people in our Indian communities will have  
12    a difficult time in learning about the pipeline proposal  
13    and its impacts and in presenting their positions to this  
14    Commission we need more time to provide the supplementarv  
15    type of research that is required to strengthen these po-  
16    sitions in those communities. But that time frame is not  
17    forthcoming because the national interest is dependent upon  
18    a greater international political pressure; that of  
19    conveying natural gas for the United States to the United  
20    States.

21                  I would like to point out to the  
22    Inquiry that although the emphasis for this Hearing is on the  
23    Alcan Highway pipeline proposal, that there are other alter-  
24    natives. The pipeline which will make the transfer of natural  
25    gas possible from Alaska to the lower 48     does not have to  
26    go via the Alaska Highway route. There are other possibilities





1 such as the Tintina Trench through the Alaskan are looking  
2 at to possibly build a railway line. In fact that natural  
3 gas pipeline does not have to go through the Yukon at all.  
4 We understand that to a good many of the 170,000 Alaskans  
5 the El Paso proposal is alive and well and living in Anchorage  
6 To them the El Paso proposal is very much a reality. Let us  
7 not get locked into the notion that the proposal at hand is  
8 the only proposal. It is not. If we subscribe to good and  
9 modern planning, then we should keep in mind that all of the  
10 alternatives should be kept open and all should be studied  
11 well.

12 We will participate in these hearings  
13 to the best of our ability, and we will attempt to convey  
14 and continue to convey the position of all the Yukon Indian  
15 people. We realize that it is the nature of this preliminary  
16 hearing that the time frame is very restrictive and we  
17 realize that you as Commissioners are not to blame, but I wish  
18 that you would carry out our words of discontent back to the  
19 Government of Canada, this Government which has established  
20 this Commission, and convey our dissatisfaction in a way in  
21 which this socio-economic hearing was set up  
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Njootli, Johnson.  
In Chief

1                   Your final report must reflect the lack  
2 of research, the lack of time for preparation, as well as the  
3 eventual lack of complete community participation of our  
4 Indian people in each respective community and we feel that  
5 it is duty upon you to reflect these factors. As you travel  
6 from community to community, we will attempt to convey the  
7 ramifications of what a pipeline is and we hope that our  
8 people in those communities will participate in a manner that  
9 is constructive and informative. But we cannot promise you  
10 that they will. We can just advise you to expect to take  
11 the full brunt of their dissatisfaction in the manner in  
12 which the socio-economic hearings have been held.

13                   We will go on record as expressing our  
14 dissatisfaction in regard to the belated establishment of  
15 this Commission and the time-frame in which it is being held.

16                   We hope, Mr. Lysyk, and Members of the  
17 Inquiry, that this background information will be of  
18 assistance to you in providing a perspective on our position.  
19 The land claims is extremely important to us; a pipeline  
20 and the development it represents will ruin our chances to  
21 determine a future for ourselves.

22                   We thank you for listening.

23                   MR. CHAIRMAN: Thank you, Mr. Njootli.

24                   Mr. Johnson? Whenever you're ready,

25 Mr. Johnson?

26                   MR. JOHNSON: Yes. Mr. Chairman,



Njootli, Johnson  
In Chief

1 and Members of the Inquiry, I wish to welcome you to the  
2 ancestral lands of the Yukon Indians, the land which we claim  
3 is rightfully ours, the land which we have to this day,  
4 never surrendered.

5 I recognize that the Federal Government  
6 of Canada has imposed upon you a ridiculously short period  
7 of time in which to conduct research and hear evidence. We  
8 totally oppose this superficial hit and run approach. But  
9 the fault lies with the Federal Government, not with you.  
10 We participate in this farce only under duress, in the hope  
11 that you may be able to talk some sense to the Federal  
12 Government. But I wish you to know at the beginning that  
13 Yukon Indian people have not had, and will not have,  
14 sufficient time to conduct research, inform our people, help  
15 them to gather their thoughts and present their views to you  
16 before you make your report to the Federal Government on  
17 August 1st. But faced with this rush job, we will do our best  
18 to give you some idea of the deep concern we feel about this  
19 pipeline proposal and how it might affect our people.

20 If I may quote from Justice Berger's  
21 report, "We must now address the central questions, can we  
22 build a pipeline and at the same time, do justice to  
23 native claims?" My people, through their stand taken in the  
24 General Assembly of the Council for Yukon Indians give you  
25 their very clear answer to that question: "No pipeline  
26 building through the Southern Yukon will be considered until





1 after Land Claims have been settled and implemented."

2 There are many reasons why we take  
3 this position. I wish you to know what these reasons are.

4 If the cultural, social and economic  
5 well-being and development of our people is to be a reality,  
6 then the settlement and implementation of our land claims  
7 must occur before a pipeline. This is an essential condition  
8 for our healthy development. It does not matter what  
9 assurances are given to us by pipeline companies or by the  
10 Government. They have difficulty understanding our needs  
11 and circumstances or they choose to ignore them. Neither  
12 will it do any good for your Inquiry to recommend to the  
13 Government, a series of conditions to alleviate impact of  
14 the pipeline. Such conditions would make only a minor  
15 difference. The only question which has any meaning for  
16 our chances for positive development is whether the  
17 pipeline is or is not to be built before our land claims are  
18 settled.

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1                                If the pipeline is built before our  
2       claims are implemented, we will have little control over  
3       what happens to us as a people over what happens to our  
4       villages and over what happens to the land which is the basis  
5       of our culture and which we now claim through government and  
6       legal processes.

15 We have all seen what happened  
16 with native rights in the south, after treaties were signed.  
17 We are determined that this history shall not be repeated in  
18 the Yukon.

22                   It is the pipeline -- if the pipe-  
23       line is built before our claims are implemented, then the  
24       land that is required for the pipeline right-of-way, the  
25       energy corridor and the auxiliary facilities will no longer  
26       be available for selection to our claim.



Njootli, Johnson  
In Chief

1                   Some say this is not a problem since  
2 the highway right-of-way already exists, but this is a clouded  
3 view of reality. Justice Berger has already suggested that  
4 there is a high probability that an additional oil pipeline  
5 or looped gas pipeline will likely follow any gas pipeline  
6 which is built. Land along the 'corridor will be gobbled up  
7 for village expansion, for new industries, for all of the  
8 other things that grow up around an energy and transportation  
9 corridor.

10                   We know from what has happened in  
11 other places, that a development of this scale will bring a  
12 vast influx of many kinds of people -- construction workers,  
13 job-seekers, carpetbaggers, family dependents and all the  
14 people who are needed to provide services and goods to them.  
15 Not least of these, will be many new divisions to be added  
16 to the bureaucratic armies of both Territorial and Federal  
17 Governments and these people will control, regulate and  
18 suppress us even more.

19                   The initial pipeline will begin an  
20 accelerated process of large scale developments here over  
21 which we'll have little or no influence. With the Alcan  
22 Pipeline in place, the Dempster lateral will become a logical  
23 next-step. Our river valleys and renewable resources will  
24 be flooded to provide huge reservoirs for hydro-electricity  
25 to power new mines and smelters.

26                   Also, the Alaska Highway will soon



Niootli, Johnson  
In Chief

1 be paved. These developments and the massive in-migration  
2 which they generate, will bring an expansion and entrenchment  
3 of southern political, economic and social patterns, thereby  
4 reducing our ability to control our own lives and prevent  
5 further damage to our social and cultural life.

6 All along, the proposed route are  
7 lands of special importance to our people. Rapid development  
8 at this time, would remove these lands from selection. Much  
9 of the land still available would be spoiled and useless to  
10 my people. Native villages along the route require special  
11 protection and land set aside for their use. This pipeline  
12 would eliminate these rights and claims for such land use and  
13 management for our villages.

14 If we are to reduce poverty and  
15 employment among our people, we must control land for  
16 economic development. Traditionally, we have had a spiritual  
17 relationship with the land and live in harmony with it.

18 We wish to continue this, but through  
19 more modern methods of renewable resource harvesting and non-  
20 renewable resource extraction which does not permanently scar  
21 the land. This proposed pipeline and spin-off developments  
22 would inevitably prevent us from obtaining much of this type  
23 of land and would reduce the time available to create viable  
24 industries before other types of dominant society developments  
25 run us over.

26 This pipeline would necessitate



Njootli, Johnson  
In Chief

1 government regulatory bodies to supervise construction and  
2 control land use and management. Our people will have  
3 negligible influence over these matters and government will  
4 have firm control through their greatly expanded bureaucracies.

5 The historical pattern of Indians  
6 being shunted aside to make way for White developments, will  
7 occur once again. We will get what our southern Indian  
8 brothers got -- the land no one else wanted, but should it  
9 later prove valuable, we will be deluged by expropriations  
10 and easements.

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1 A pipeline now would minimize our  
2 chances to participate in development of potential benefit  
3 to our people. Only after land claims implementation will  
4 we have the necessary lands, capital and skill to participate  
5 in larger development. It will take time to gain these and  
6 to ensure that we are not once again left behind, and without  
7 the benefit, which other groups receive. Some, including  
8 a few of our own people, will say the pipeline would provide  
9 jobs for Indians. There are very few it would. They  
10 would not realize that such jobs are short term and unskilled  
11 and would result in their return to the welfare rolls later.  
12 Their absence would remove the chance for community development.  
13 For the vast majority of Indians, however, they would be out  
14 of luck, the skills, well-paid jobs would go to southerners,  
15 probably Americans. A few might get hired as token Indians,  
16 but the rest would spend much time in the bars. When the  
17 pipeline was completed, most Indians would be without a  
18 pay cheque, unless Welfare paid them to take up alcohol  
19 rehabilitation.

There is another important area of our claims which would be severely prejudiced if a pipeline is built now. I refer to our wishes to regain control of our own lives, to be self-reliant to have the ability to make our own decisions about matters which affect our lives; rights and privileges to freedom and democracy.

26 A pipeline now would mean a substantial



1 influx of white in-migration, both as a direct and indirect  
2 result of the project. We would become an even smaller  
3 minority in our own land. We would have no land and no  
4 resources. We would have almost no political influence and  
5 decisions would be made by the vast White majority which  
6 would control our lives. We would not have had time to  
7 develop our own structures of decision-making and we would  
8 have no land or resources to make decisions about. We  
9 would be relegated to the political backwaters of our land.  
10 We would remain an underdeveloped people with no prospect for  
11 improvement. Our constitution and aboriginal claims to  
12 self-determination would be effectively lost.

13                   Some have suggested that the Government  
14 could develop means to control in-migration and land-use.  
15 Based on the experience in Alaska and elsewhere, we do not  
16 think this can be realistically accomplished. But even if it  
17 could, it would require massive increases in government powers.

18                   This would drastically reduce our own  
19 ability for self-determination and would make the development  
20 of INdian decision-making almost impossible. So, you see,  
21 whichever path results, we, the Indian people of the Yukon,  
22 will be the biggest losers and the opportunities we desire  
23 from a claims settlement will remain only as unrealized  
24 dreams. It would turn the land claims negotiations into an  
25 elaborate, although perhaps dramatic, farce, with our  
26 people relegated to playing a few bit parts in the script .



Njootli, Johnson '  
In Chief

1                   If a pipeline is built now, it would  
2 also have serious impacts for social problems affecting our  
3 people. You know already, that we battle with problems of  
4 alcohol abuse, community disorganization and person breakdowns  
5 resulting in numerous harmful symptoms. This has resulted  
6 because our people have lost control over some of their lives.  
7 We have temporarily lost the personal and material resources  
8 to develop ourselves. We have been relegated to the  
9 position of outcasts in this wider society.

10                   We must regain control over our lives  
11 and processes of community development, if these trends are  
12 to be reversed. We must regain the responsibility for dealing  
13 with our own problems. This means that through our claims  
14 settlement, we must be responsible for managing many social  
15 services and for directing the regeneration of our communities.

16                   If a pipeline is built now, alcoholism,  
17 crime, family break-downs and native social and cultural  
18 disorganization will increase drastically. This will set our  
19 improvement back for decades. Two things can happen; if the  
20 Government has no additional money to increase social  
21 services, then our people would have no help in solving  
22 their social problems. If the Government can find money, it  
23 would mean a rapid bureaucratic expansion of social workers,  
24 alcohol counsellors, parole officers, and policemen. These  
25 will be White people who do not understand Native people. They  
26 will be foreigners, mostly from the South, who will have even



Njootli, Johnson.  
In Chief

1 greater control over our lives.

2 Both the increase in the social problems  
3 and the bureaucratic solutions will greatly decrease our  
4 chances of reducing our social problems. There would be  
5 a decrease among our people in the meaningfulness of their  
6 lives and in their control over their own destiny.

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1                                   It would not work to give us lots of  
2 money to create instant native social services. We cannot  
3 train our people in time and the sheer magnitude of the pipe-  
4 line impact on the cultural and social life of our commu-  
5 nities would overwhelm both Native clients and Native social  
6 service workers. we don't want handouts to mop up increased  
7 social problems. We want to prevent the growth of our social  
8 problems so we can get on with the business of improving our  
9 lives and opportunities.

10                                   I have been asked what the implica-  
11 tions are of not recognizing our claims and of proceeding  
12 with a pipeline before settlement and implementation. I have  
13 been asked about the feelings and frustrations among our people  
14 which have and will result in bitterness and rage. I have been  
15 asked about the possibility of violence and civil disorder.  
16 I do not know whether there will be violence and disorder  
17 if a pipeline is built before our claims are settled and  
18 implemented. But I do know there will be frustration<sup>/bitterness</sup> and rage  
19 among our people. Mr. Blair of Foothills has said there have  
20 been no outright threats of violence connected with the Alcan  
21 route. We are prepared to use court action if necessary, but  
22 is Mr. Blair suggesting that we will have to use violence to  
23 demonstrate our opposition to this pipeline being built or  
24 proposed. We hope that he is not suggesting that violence will  
25 be the only way to stop it. Perhaps we should recall what  
26 Justice Berger said recently in his report:



1 "There is the real possibility of civil disobedience and  
2 civil disorder. We have to believe that these things  
3 are possibilities. But I can predict with certainty  
4 that if the pipeline is built before a settlement is  
5 achieved, the communities that are already struggling  
6 with the negative effects of industrial development will  
7 be further demoralized. To the extent that the process  
8 of marginalization - the sense of being made irrelevant  
9 to your own land - is a principal cause of social  
10 pathology, the Native people will suffer its effects in  
11 ever greater measure."

12 The lesson to be learned from the  
13 events that 19th Century is not simply that the failure  
14 to recognize Native Claims may lead to violence, but that  
15 the claims of the White settlers and the railway, once  
16 acknowledged, soon made it impossible to carry out the  
17 promises made to the Native peoples.

18 The Government of Canada was then and  
19 is now committed to settling the claims of the Native  
20 people. White settlement of the West made it impossible  
21 for the Government to settle Native claims. Today, the  
22 Government of Canada is pledged to settle Native claims  
23 in the North, and the pledge is for a comprehensive  
24 settlement. It is my conviction that, if the pipeline  
25 is built before a settlement of Native claims is made  
26 and implemented, that pledge will not and, in the nature  
of things, cannot be fulfilled."

17 Judge Berger has spent over two  
18 years examining the relationship between pipeline construction  
19 in the North and Native land claims. Due to the lack of fore-  
20 sight of the Federal Government, your Inquiry will only be  
21 permitted one-tenth that time. Thus I think it is appropriate  
22 for you to thoroughly consult his report. While the cir-  
23 cumstances of the Mackenzie Valley region are not identical  
24 to those of an Alcan route, his remarks about the Northern  
25 Yukon are entirely applicable to this Inquiry. As well, the  
26 basic situation regarding the land claims issue is the same  
in the Yukon as in the Mackenzie Delta. To ensure that you



Njootli, Johnson.  
In Chief.

1 are clear about the position of the Council for Yukon Indians,  
2 I wish to quote some of his conclusions which support the  
3 position we take.

4 "In my judgement, we must settle Native claims before we  
5 build a Mackenzie Valley Pipeline. Such a settlement will  
6 not be simply the signing of an agreement, after which  
7 pipeline construction can then immediately proceed.  
8 Intrinsic to the settlement of Native land claims is the  
9 establishment of new institutions and programs that  
10 will form the basis for Native self-determination."

11 The issue will comes down to this:  
12 Will Native claims be rendered more difficult or even im-  
13 possible of achievement if we build a pipeline without first  
14 settling those claims? Must we establish the political, social  
15 and economic institutions and programs embodied in the  
16 settlement before building a pipeline. Unless we do, will the  
17 progress of the Native people toward realization of their  
18 goals be irremediably retarded. I think the answer clearly  
19 is yes. The progress of events once a pipeline is under  
20 construction will place the Native people at a grave disadvan-  
21 tage, and will place the Government itself in an increasingly  
22 difficult position. In my opinion, a period of 10 years will  
23 be required in the Mackenzie Valley and Western Arctic to  
24 settle Native claims and to establish the new institutions and  
25 the new programs that a settlement will entail. No pipeline  
26 should be built until these things have been achieved.





Njootli, Johnson ·  
InChief

1                   You can sign an agreement or you can  
2 impose one; you can proceed with land selection; you can  
3 promise the Native people that no encroachments will be made  
4 upon their lands. Yet you will discover before long that  
5 such encroachments are necessary. You can, in an agreement,  
6 promise the Native people the right to rebuild the Native  
7 economy. The influx of Whites, the divisions created among  
8 the Native people, the preoccupations of the Federal and  
9 Territorial Governments, faced with the problems of pipeline  
10 construction and the development of the corridor, would make  
11 fulfillment of such a promise impossible. That is why the  
12 pipeline should be postponed for 10 years.

13                   It would be dishonest to impose  
14 a settlement that we know now - and that the Native people  
15 will know before the ink is dry on it - will not achieve  
16 their goals. They will soon realize - just as the  
17 Native people on the Prairies realized a century ago as the  
18 settlers poured in - that the actual course of events on the  
19 ground will deny the promises that appear on paper. The  
20 advance of the industrial system would determine the course  
21 of events, no matter what Parliament, the Courts, this Inquiry  
22 or anyone else may say.

23                   If we think back to the days when  
24 the treaties were signed on the Prairies, we can predict  
25 what will happen in the North if a settlement is forced  
26 upon the Native people. We shall soon see that we cannot





Njootli, Johnson ·  
In Chief

1 keep the promises we have made."

2 If a pipeline is built now, it will not  
3 serve Canadian needs, but rather, American needs. There will  
4 be a few short-term benefits for Canada in terms of jobs.  
5 But Yukoners will get few of these, and Natives, almost none.  
6 Those who advocate this pipeline are asking Yukon Native  
7 people to bear the massive negative impacts of the project  
8 while they reap the benefits. In realistic terms, they  
9 are suggesting that we should abandon our chances for a just  
10 claims settlement which would give us the opportunities to  
11 grow and develop in the ways and at the speed we decide is  
12 in our own best interests. We are not willing to abandon our  
13 chances for a just claims settlement to get Americans out of  
14 trouble they have created for themselves.

15 We reject such requests. We are not  
16 prepared to give up our hopes for our future. We are not  
17 prepared to barter away the opportunities for our children  
18 tomorrow. If the Federal Government forces this pipeline  
19 upon us, it will reveal very clearly that the Government is  
20 not prepared to give us justice or the right to govern our  
21 own lives.

22 I have already told the American Congress  
23 that we will use all the resources at our disposal to stop  
24 this pipeline until our claims are settled and implemented.  
25 This will likely take from seven to ten years. That is why  
26 we demand the same ten year moratorium that Justice Berger



Njootli, Johnson  
In Chief

1 has recommended to the Government.

2 We ask you to make the recommendation to  
3 the Federal Government that no pipeline be built in the northern  
4 Yukon in perpetuity and that no pipeline be considered for  
5 the southern Yukon until land claims are settled and  
6 implemented. We challenge the Federal Government and the  
7 Canadian people to demonstrate their good faith by keeping  
8 past promises to us about land claims. We wish peace and  
9 harmony between us. This pipeline decision will be a measure  
10 of such possibilities.

11 Thank you very much, Mr. Chairman.

12 MR. CHAIRMAN: Mr. Johnson, let me  
13 thank you for your presentations.

14 Two brief comments at this point, if  
15 I may. You have both expressed displeasure at the time span  
16 within which this Inquiry has been directed to prepare and  
17 present it's report. I said something about that in my  
18 opening statement, last Wednesday, and in particular I spoke  
19 about the preliminary nature of the report that we are to  
20 submit, and I do not propose to add to those comments now.

21 But I do wish to ensure that the record  
22 is clear on one matter. In the course of your statements,  
23 one or two expressions were used which if taken out of  
24 context might be misunderstood. In particular the term  
25 'white-wash' was used, and that expression is sometimes used  
26 and might be taken to carry the suggestion that this is



1 something less than a completely independent Inquiry, or that  
2 the nature of the Report that we'll submit in due course, is  
3 in some way, a foregone conclusion. Nothing could be further  
4 from the truth. Any suggestion to the contrary would be  
5 wholly unjustified. Let there be no mistake about that.

6 But, taken in context, the expressions  
7 you used and remarks you made, this Board is confident that  
8 no such suggestion was intended and that your criticism that  
9 you are levelling concerning the time that was available to  
10 this Board was aimed in another direction.

11 I might just pause there, Mr. Johnson,  
12 to afford you the opportunity, if you wish, to add anything by way  
13 of clarification to the remarks you made on this subject.

14 MR. JOHNSON: Yes, Mr. Chairman, in  
15 respect of the notion or the term 'white-wash' as it is  
16 being applied to this hearing process, I guess we could look  
17 at, well in the direction of say Mark Twain and Tom Sawyer,  
18 who was, a young gentleman who was able to get out of his  
19 job by getting someone to paint a fence for him and painting  
20 or 'white-wash' I guess, is just an initial painting job,  
21 which at the outset, or the initial outset gives the view  
22 that something has been done, something looks neat, and gives  
23 the impression of order. It is in that respect that we  
24 refer to this hearing as a 'white-wash'.

25 I take your point very well, that this  
26 is a preliminary hearing. I take that point well.





Njootli, Johnson  
In Chief

1 I'd also like to add that when we  
2 use the term "whitewash", there's no pun intended.

3 THE CHAIRMAN: Well, thank you,  
4 Mr. Johnson, as I say, I was confident from the context of  
5 your remarks, that that was the position and that there was  
6 no suggestion being made that this was not a totally indepen-  
7 dent inquiry or that in some way, what our report was going  
8 to be to the Government, was something that could be suggested  
9 to be a foregone conclusion. That obviously is not the case,  
10 and the Board would object in the strongest possible terms,  
11 to that suggestion from whatever quarter.

12 My second comment is that the Board  
13 has noted and welcomes the indications that the Council of  
14 Yukon Indians has given through you, Mr. Johnson and Mr.  
15 Njootli, of co-operation with the work of this inquiry.

16 Again, as I mentioned in my opening  
17 statement and as I've mentioned before and since, how useful  
18 our report will be, depends very heavily, very directly on  
19 the amount and the kind of co-operation that we get from all  
20 persons -- I emphasize all persons -- and organizations  
21 interested and concerned with this subject  
22 in the Yukon.

23 Mr. Goudge?

24 MR. GOUDGE: Yes sir, I wonder  
25 if it might be appropriate for us to break for a short time  
26 to have our morning coffee and then we can perhaps come back





Njootli, Johnson  
In Chief

1 and I'll ask Counsel to indicate if they have questions for  
2 Mr. Johnson and Mr. Njootli, if they could direct them then.

3 THE CHAIPMAN: All right. I'll  
4 suggest then, a ten minute coffee break.

5 MR. GOUDGE: Seven minutes.

6 (PROCEEDINGS ADJOURNED).  
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Njootli, Johnson  
Cr Ex by Bayly

1 (PROCEEDINGS RESUMED PURSUANT TO ADJOURNMENT).

2 MR. GOUDGE: Mr. Chairman, members  
3 of the Board, if we could take our seats again, perhaps we  
4 could resume and inquire if there are any questions to be  
5 asked by the participants of this panel.

6 Just before we do that, I under-  
7 stand that the map that the panel has with it, will be marked  
8 as an exhibit for the record.

9 Now sir, I canvassed some of the  
10 representatives this morning as to cross-examination and what  
11 I would like to do if I may, sir, is simply go through the  
12 list that we have of intervenors and if there are questions  
13 to be asked at this time, the panel as I understand it from  
14 Mr. Joe, is available to respond to those questions.

15 The first would be the Whitehorse  
16 Chamber of Commerce. I haven't seen Mr. Morrison -- I gather  
17 he's not here this morning -- Yukon Transportation Associa-  
18 tion, Yukon Association of Municipalities in the City of  
19 Whitehorse, the Chamber of Mines -- MS McPherson indicated  
20 to me that the Yukon Association of Social Workers has no  
21 questions of this panel. Mr. Templeton indicates he has no  
22 questions and that would bring us sir to the Yukon Conservation Society,  
23 Mr. Bayly?

24 (CYI MAP MARKED AS EXHIBIT NUMBER 31)

25 MR. BAYLY: I have a few questions,  
26 Mr. Lysyk, and if I could introduce myself to the Board as  
well as to the witnesses, my name is John Bayly and I've



Njootli, Johnson  
Cr Ex by Bayly

1 recently arrived to act as Counsel for the Yukon Conservation  
2 Society. I apologize for arriving late in this fashion and  
3 I may have a bit of catching up to do and I hope that that  
4 doesn't inconvenience the Board or the difficult schedule  
5 that I know you have.

6 THE CHAIRMAN: Thank you, sir, and  
7 welcome to the Inquiry, Mr. Bayly.

8 CROSS-EXAMINATION BY MR. BAYLY:

9 Q Mr. Njootli, could I ask  
10 you a couple of questions to begin with please. If I refer  
11 you to your evidence, could you look at Page 7 of that  
12 evidence please and you've indicated on that page, that there  
13 are -- there's an area that is objected to particularly, in  
14 the Northern Yukon and it includes pipelines anywhere near  
15 Old Crow or along the Dempster Highway.

16 Does that include the Arctic Slope  
17 route proposed by Arctic Gas as well as the Interior route  
18 of Arctic Gas as well as the Spurline that may be proposed  
19 by Foothills Pipeline at some stage?

20 MR. NJOOTLI: The position  
21 of Old Crow people has always been that there will be no  
22 pipeline at all along the prime route of the Canadian Arctic  
23 Gas proposal, which would be the coastal route in the Northern  
24 Yukon and also the Interior, approximately ten miles from  
25 Old Crow.

26 The same position would also pertain



Niootli, Johnson  
Cr Exam by Bayly

1 to the Dempster lateral route that may be proposed by any of  
2 the pipelines. The Old Crow people wish that no such  
3 development take place in those particular areas. Does that  
4 answer your question?

5 Q Yes it does, thank you.

6 Could you tell me, and I'm referring  
7 you now to Page 12 of your evidence, you refer at that page  
8 to the amount of time that has been given for preparation  
9 and for the community hearings, as being insufficient at  
10 this Inquiry. You've indicated that's nobody's fault here  
11 at the Inquiry, but nonetheless, it's insufficient.

12 Ideally, how much time do you feel  
13 it would take to prepare the communities adequately to respond  
14 to the proposal that has been put forward by Foothills Yukon?  
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1                   A       I would like to comment on the  
2 contract that I have had with the Department of Indian Affairs  
3 previously, just before the Berger Inquiries along the  
4 Mackenzie Valley containing all the communities that are  
5 within the Valley. The contract was to inform and educate  
6 the communities along that Valley on the Pipeline Inquiries.

7                   It took me a year and a half to inform  
8 the communities, and the Government told me that they had  
9 no fundings. I myself, feel personally, that educating  
10 Indian people, who have no knowledge at all, with regards to  
11 big developments, such as the Mackenzie Valley proposal, that  
12 it would take approximately two to three years to prepare.  
13 I'm speaking of approximately thirteen or twenty communities.  
14 With this respect, where nine communities are involved, I  
15 would think about two years would be sufficient time to  
16 prepare such a region for Inquiries that are as important  
17 as this one.

18                  Q       Your concern then, Mr. Njootli, I  
19 take it, is that this commission will not be able to get any more  
20 than a superficial view of the concerns of the people in the  
21 communities?

22                  A       Well, like I stated in my evidence,  
23 that we'll try to the best of our ability, to participate in  
24 the Inquiry, but then that the Inquiry must make our requests  
25 known to the Government that we didn't have sufficient time  
26 to really get our people prepared for the Inquiry.



1 Q Are you worried at all that the  
2 time given to this commission will not enable it to take back  
3 to the Government sufficient information that proper recommendations  
4 can be made with regard to this pipeline proposal?

5 A Well, with regards to my -- I'd  
6 like to comment more on my submission, Mr. Lysyk, that I believe  
7 that it would be up to you to give that request to the  
8 Government. It is only my position to make this presentation.

9 Q I can understand that. Can I  
10 refer you to page 13 of your evidence, in the second paragraph,  
11 the first full paragraph, you talk about other possibilities  
12 for pipeline routes in the Yukon, and one of those is the  
13 Tintina Trench. I take it you're not recommending that as  
14 a route, but you're just suggesting that there are other  
15 alternatives that should be looked at. Is that correct?

16 A What I'm suggesting is that the  
17 policy of the Yukon Indian people is not to have any routes  
18 at all in the Yukon. Not to have any pipelines at all until  
19 our land claims have been settled and implemented and that  
20 there is a possibility that there is an El Paso route which  
21 is a realistic route.

22 Q You would <sup>prefer</sup> to see all pipelines  
23 stay out of the Yukon Territory if at all possible?

24 A That's true.

25 Q Mr. Johnson, if I could refer to  
26 your evidence now, please.



1                   You talk, at the second page of your  
2 presentation, about the settlement and the implementation of  
3 land claims. I take it that you are concerned that you not  
4 be misunderstood, that the signing of a Land Claims Agreement  
5 should not be a license to run any kind of major development  
6 through the Territory of the Council of the Yukon Indians.  
7 Is that correct?

8                   MR. JOHNSON: Yes, that is correct.  
9 When asked about implementation, or what does implementation  
10 mean, it largely becomes a question of definition. I may  
11 point out, Mr. Chairman, that there may be certain aspects,  
12 certain elements of our claim that may be implemented before  
13 a final agreement is signed.

14                   Also, there may be other elements,  
15 aspects of the claim, which may take, which could be  
16 implemented immediately upon the signing of a final agreement.

17                   Other aspects may take two years, and  
18 other aspects of the claim will be an ongoing type of affair,  
19 where implementation will just continue. The question then  
20 is, when the Council of Yukon Indians, when will the people  
21 of the Yukon be satisfied that a claim is sufficiently  
22 implemented in order that say major developments could  
23 continue.

24                   We say, Mr. Chairman, that there are  
25 certain very critical, very important elements of our claim  
26 which have to be implemented, and I'd like to tell you what



1 they are.

2 We have, for example, one important  
3 part of our Claim, is based on -- has to do with land, with  
4 the control of land, and with local control being able to  
5 plug into some form of territorial government, which may  
6 exist after the land claims. Some form of territorial  
7 government which we, the Indian people, will have had a  
8 hand in designing. The reason that we want to do this is  
9 because at this time, we do not feel that the Territorial  
10 Government that is here represents the Indian people. We  
11 don't feel that.

12 We feel that the Territorial Government  
13 here, is largely a white Government.

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15 And the reason for that is because  
16 if it doesn't take place in that order, then what will happen  
17 is that the existing institutions will simply become entrenched  
18 into the system that, you know, as a system that exists  
19 now, with this large in-migration of people and the services  
20 that are required to accommodate them.

26 A Yes.



1 Q Now, you have talked about,  
2 and so has Mr. Njootli, the kinds of problems that have already  
3 been encountered by Yukon Native people because of other boom  
4 developments. We could perhaps refer to both the Gold Rush and  
5 the Highway as the two major developments of that kind. Do  
6 you expect more of the same from the construction of a pipeline?

7 A Yes, we do.

8 Q And do you see any possi-  
9 bility of being able to protect yourselves from these kinds of  
10 impact, without having some form of land claims settlement and  
11 implementation?

12 A No.

13 Q Now, with regard to jobs  
14 on the pipeline, has it been the experience of the Indians  
15 of the Yukon in the other major developments, referring spe-  
16 cifically to the Highway, that jobs were promised and indeed  
17 given for a short period of time, and that the people found  
18 themselves in either the same or a worse position after the  
19 development had gone through?

20 A Yes, it has been the ex-  
21 perience of the Indian people, and I refer specifically to the  
22 packers who did a lot of work, packers and guides who guided  
23 many White people here in the Yukon to get them to the Gold  
24 fields. Temporary jobs, we refer specifically to many of our  
25 people who moved to the rivers during the days of the paddle-  
26 wheeler, and cut wood along the rivers in order to provide



1 fuel. Temporary jobs, again. And we refer to the Alaska  
2 Highway where some our men worked 25 cents a day, surveyors,  
3 yes, labour, temporary jobs again. And more recently, we  
4 refer to the Anvil Mine out at Faro, where, I think something  
5 like, I don't know, something like 20 to 25 percent of the  
6 jobs were promised, you know, they said they would make them  
7 available for Northerners, and of course, once again, the  
8 Indian people got sucked in because they thought they meant  
9 natives, but  
10 Northerners could have been anybody that was in the North.  
11 And no doubt, that will continue to happen. And what happened  
12 in Alaska, I'm informed was that the pipeline companies made  
13 promises to the Native organizations in Alaska when they were  
14 going to build the Alyeska Line, that they would hire, you  
15 know so many thousands of people. Okay, what happened then,  
16 was the pipeline companies sub-contracted out, you know,  
17 a lot of that work, and what happened was that the sub-con-  
18 tractors hired their own people, and when the Native orga-  
19 nizations questioned the pipeline company about this, they  
20 simply answered, well we have no control over people we sub-  
21 contract to. And I see no reason why this type of thing  
22 wouldn't continue. And I think our way of protecting our-  
23 selves from that, is by settling the land claim first.  
24 Q I take it as a further  
25 extension of that, that you feel that the Yukon Indian should  
26 be involved in deciding who is a Northerner or who is entitled  
to work on this project, if there is to be any preferential  
hiring.





1 A We most definitely do.

2 Q Those are all the questions I  
3 have, that you very much, both. Thank you.

4 MR. GOUDGE: Next on the list, Mr.  
5 Chairman and Members of the Board, will be Mr. Horton for  
6 the Government of the Yukon.

7 MR. HORTON: I have no questions, Mr.  
8 Chairman.

9 MR. GOUDGE: And, sir, Mr. Taves, for  
10 Canadian Arctic Gas?

11 CROSS-EXAMINATION BY MR. TAVES:

12 MR. TAVES: I have a couple of questions,  
13 Mr. Chairman.

14 Mr. Johnson, last week Mr. Burrell gave  
15 evidence that in his opinion it would be reasonable for the  
16 Land Claims to be settled by the spring of 1978 at which time  
17 you wish to begin surveys, et cetera, along the route?

18 MR. HOLLINGWORTH: Excuse me, would  
19 you mind referring me to the page number for that reference  
20 please?

21 MR. TAVES: The page number, sir, would  
22 be page number 478 of Volume 3, overlapping onto page 479.

23 Do you think that's reasonable, Mr.  
24 Johnson?

25 MR. JOHNSON: No, I do not.

26 Q When you speak of a ten year





1 moratorium, and you've just spoken about implementation  
2 of policies, are these two related? In other words, do  
3 you think it would take ten years to get the particular  
4 implementation you just referred to in gear?

5 A Sorry, I missed that last part  
6 of your sentence.

7 Q You've just been speaking about  
8 what you consider to be implementation and what is required,  
9 and you also state in your evidence that you would like a  
10 ten year moratorium on a southern pipeline. I'm wondering if  
11 these two are related, in other words, do you think it would  
12 take ten years before you can achieve the land claims?

13 A Well, Mr. Chairman, perhaps I  
14 could give the panel some idea of what I view to be a time-  
15 frame in which a settlement could be made and implementation  
16 to take place.

17 At present, in the Council for Yukon  
18 Indians' involvement with the Federal Government, we are  
19 making relatively good headway in that we are developing  
20 a framework, a foundation, of a philosophy, you know, for  
21 this claim. For this land claim of ours. We have stated  
22 what our aims are in respect of settling this claim, we  
23 have come to an understanding in respect of who the  
24 participants of the claim will be, and we have a number of  
25 projects which are presently being researched. Projects  
26 such as education, projects such as corporate structures,



1 and in developing these ideas, Mr. Chairman, of the claim  
2 at the Planning Council, which is the forum in which this  
3 claim is being dealt with, it is not a difficult task to  
4 develop a proposed agreement in principle. That is not a  
5 difficulty. The difficulty, and what I mean by difficulty,  
6 is, of course, the timing or the time frame, is the  
7 ratification process which this proposed agreement in  
8 principle must go through.

9 All of our people in the Yukon must  
10 understand and must know and must agree that this proposed  
11 agreement in principle is what they want. If they don't  
12 agree, or fully agree, there will be parts, no doubt, that  
13 will be taken back to the planning process, and renegotiated.  
14 Until such time as our people are satisfied that that  
15 Agreement in Principle is what our people want.

16 At that point, the next major step,  
17 is the step towards a final agreement.

18 Let me back-track a bit, I want to  
19 include a time frame here. Now, in talking about this  
20 ratification process, in my mind at this time, and of course  
21 I'm speculating, I would say that a ratification process  
22 would take, easily from six months to a year, very easily.  
23 At which time an Agreement in Principle might be signed,  
24 but one never knows, you know, because anything can happen.  
25 I think we all know that.

26 Okay, the next major step then is the



1 move toward final agreement. The whole concept of flushing  
2 out the agreement in principle, writing in the fine print,  
3 drafting up the legislation that is required, designing  
4 programs, perhaps programs that fit into a twenty year, long  
5 range plan. Those types of things.

6 That, in my mind, I can see easily  
7 taking two years. Then, once again, we have a proposed final  
8 agreement, and that final agreement has to be ratified once  
9 again. It has to be taken back to our people in the  
10 communities, to every community, perhaps we may have to have  
11 people go around to the communities and explain the document,  
12 simiarly, I might add to what Judge Berger is proposing,  
13 which is to go back to all the communities and explain his  
14 paper, the Report.

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Njootli, Johnson  
Cr Ex by Taves

1                   That type of thing we would have to  
2 do and then probably, perhaps have hearings on them as well,  
3 public -- you know, public hearings, maybe several in each  
4 community, maybe more and then at the same time, this  
5 ratification process will probably require that this final  
6 agreement document -- this proposed final agreement document  
7 be taken back and elements of it to be renegotiated once  
8 again.

9                   The ratification process on this,  
10 I can easily see taking a year to two years and so just to  
11 have a final agreement signed, we're talking maybe about  
12 six or seven years and then I talk about the implementation  
13 stage of the claim, you know, where certain elements of the  
14 claim have to be in place before it's meaningful to the  
15 Indian people of the Yukon and perhaps to other Yukoners as  
16 well.

17                   In that respect, I hope I answered  
18 your question by giving you this time frame.

19                   Q           Yes you did. Thank you  
20 very much.

21                   Mr. Johnson, you mentioned, or I'd  
22 like to read to you if I could, evidence given by Mr. Blair  
23 at the NEB hearings on -- Oh, it just says April, 1977 --  
24 regarding the Foothills policy with -- for the Yukon land  
25 claims. I'd like to get your comments.

26                   MR. HOLLINGWORTH:       Again, would







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1 my friend again, give me a page reference from the National  
2 Energy Board transcripts.

3 MR. TAVES: Page 9 sir.

4 MR. HOLLINGWORTH: Page 9?

5 MR. TAVES: This is Page 9 of  
6 the policy evidence which was filed by your office.

7 Q The question to Mr. Blair  
8 was, do you rate the fact of native claims as being a primary  
9 issue? The answer was I do, because I do not think it is  
10 practical to expect to be able to finance, construct or  
11 operate in any of the northern jurisdictions until such  
12 time as those claims have been met or satisfied or comprise,  
13 achieve, to a sufficient degree that there is a general  
14 acceptance of the fact of a pipeline project.

15 Now, does that conflict with your  
16 idea of implementation?

17 A Sorry?

18 Q Does that conflict with  
19 your idea of implementation?

20 A There's only one thing --  
21 I have difficulty relating the quote to your question, sir,  
22 I'm sorry.

23 Q Well, he's speaking of  
24 meeting, satisfying or comprising Indian land claims. You're  
25 speaking of implementing Indian land claims. I'm asking,  
26 do you intend to, or is there any aspect of comprise in your



1 position?

2 A No.

3 Q He further goes on, on

4 Page 10 of that same page. He discusses financing and things

5 which I think are irrelevant and I'll continue the quote on

6 Page 10. He says,

7 "Considering the position only from the point of

8 view of native claims, I think there can be no

9 doubt that a pipeline connection along the

10 Alaska Highway can be accomplished much more

11 quickly than one down the MacKenzie Valley.

12 Connection of the Delta Gas which is not required

13 on an emergency basis, could then be accomplished

14 over a longer time frame which would permit

15 negotiations of the native claims in the Mackenzie

16 Valley or along the Dempster Highway."

17 Now, do you think it's easier to get a native claims settle-

18 ment in the Yukon than it would be in the Mackenzie Delta?

19 A It's very difficult to say,

20 sir.

21 Q My third question, Mr.

22 Johnson, is this and I'd like to get your response to this

23 particular item I heard on the news this morning.

24 Mr. Gillespie was asked for his

25 response to your statement that a ten year moratorium was

26 required for a southern pipeline and the radio report of his



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1 reply was that he said that Mr. Johnson is a political leader  
2 and that's the kind of response he'd expected from a  
3 political leader.

4 Now, I'd like to get your response  
5 to that, in that do you think that the Federal Government  
6 does not take you seriously?

7 A Well, if they don't, I  
8 think they soon will.

9 Q Thank you. That's all the  
10 questions I have.

11 MR. GOUDGE: Next sir, on my  
12 list, is Mr. Hollingworth for Foothills Pipeline.

13 MR. HOLLINGWORTH: I have no  
14 questions sir.

15 MR. GOUDGE: Then sir, if there  
16 are any members of the public who would like to ask questions  
17 of this panel --

18 THE CHAIRMAN: Is there anyone  
19 present who wish to address a question to the panel?

20 MR. GOUDGE: If not sir, I have  
21 one or two questions.

22 CROSS-EXAMINATION BY MR. GOUDGE:

23 Q Mr. Johnson, just for clarification,  
24 you gave the Board the Council position, no pipeline building  
25 through the Southern Yukon will be considered until after  
26 land claims have been settled and implemented. I take it  
that's a resolution of the Council, is that right?



Njootli, Johnson  
Cr Exam by Goudge

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MR. JOHNSON: That's correct.

Q And is that a resolution  
that was passed sometime ago?





1 A Yes,

2 Q Roughly when, soon after it's  
3 conception as an organization, or do you know?

4 A It was, I believe it was  
5 last May, probably between May 25 - 29, of 1975, I believe that  
6 the---

7 Q And I take it from the rest  
8 of your position that your concern focuses on things like the  
9 land that will be required for a pipeline, the in-migration  
10 that will come with a pipeline and the government regulations  
11 that will come with the pipeline, those sorts of concerns are  
12 upper most in the minds of the Organization. Is that right?

13 A Yes.

14 Q And, is it fair to say that  
15 when you use, when the Council says no pipeline building  
16 through the southern Yukon, what you're concerned about is  
17 those aspects of the pipeline operation, not simply putting a  
18 pipe in the ditch, that leads to things like removal of land  
19 from a possible claims settlement, in-migration, and government  
20 regulations. Those, it's all aspects of the pipeline operation,  
21 not simply putting a pipe in the ditch.

22 A That's correct. It's like,  
23 I mean, we have the similar story with the Dempster Highway,  
24 here in the Yukon, and the experts from the Roads and Airstrips  
25 Division tells us, well, the highway itself is not a problem  
26 for the caribou, I mean, it doesn't bother the caribou. It's



Njootli, Johnson  
Cr Ex by Goudge

1 like saying, well, the pipeline itself doesn't bother the  
2 Indians or other people who are impacted by it. It's the  
3 activity and the spin-off type of actions that result in the  
4 impacts to animals on the land, as well as people.

5 Q So that as soon as things  
6 happen in connection with the pipeline project that cause land  
7 to be made unavailable for a claims settlement or that cause  
8 in-migration or that cause added government regulations, your  
9 concern arises?

10 A Yes.

11 Q Now, just one or two matters  
12 of clarification relating to the present state of negotiations.  
13 You're, I take it at this stage, not yet at the point where  
14 you've got, if I can put it this way, a draft agreement in  
15 principle that can go back for ratification?

16 A No, we are in the process,  
17 Mr. Chairman, of developing what we refer to as a "settlement  
18 model", a very general type of thing which we are preparing  
19 for ourselves to get a picture of what a claim could conceiv-  
20 ably look like.

21 Q The one, in giving, well I  
22 understand that the time estimates are, at this stage, approxi-  
23 mate and your own, one element of the time frame that I didn't  
24 get from you was, if you have any estimates that you could give  
25 us as to the time between now, say, and when you might antici-  
26 pate an agreement in principle of a draft kind, that could then



1 begun to be taken back to the communities for ratification?

2 A Right. Mr. Chairman, I feel  
3 personally that we can accomplish<sup>a</sup>/proposed agreement in princi-  
4 ple paper to be taken back to the communities for the initial  
5 stages of ratification by the end of this calendar year.

6 Q And then you went through  
7 your estimates as best understanding that they're tentative  
8 obviously, at this stage of process that would follow that.

9 Again, for, to be sure that I under-  
10 stand, when you come to the end of the process, as you've des-  
11 cribed it, the implementation part of the process, I take it  
12 your concern focuses on certain parts of certain areas that  
13 will undoubtedly be subject of a settlement, certain areas as  
14 being, in your view, crucial to implement before any develop-  
15 ment. Am I right that control of land is one major element,  
16 is that right?

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1                   A       Yes, our people definitely feel  
2     that the land on which they live, whatever communities  
3     they are around, our people feel that they definitely need to  
4     have a hand and a meaningful say in the control of how land  
5     is used and managed.

6                   Q       The second thing I think you  
7     mentioned was some participation in the Government structure  
8     in the Yukon. Is that an element that you see as being one  
9     of those that I think you called crucial for implementation  
10    before there would be a pipeline?

11                  A       Yes, this is what I envision.

12                  Q       Yes. Are there any others, at  
13    this stage, that fall into that category of being really  
14    fundamental from the point of view of the Organization, and  
15    the people it represents?

16                  A       Well I think that the two points  
17    that I mentioned are the essentials. I don't think there are,  
18    well off hand, others that are as important as those two.

19                  Q       Now, in connection with your  
20    basic position that you recite at the bottom of page one of  
21    your evidence, I took it from Mr. Njootli that that position,  
22    'no pipeline building through the southern Yukon until after  
23    Land Claims have been settled, and implemented' that applies  
24    to the Tintina Trench possibility, or the Dawson City  
25    possibility as well. Is that right, Mr. Njootli?

26                  MR. NJOOTLI: That's right.







Njootli, Johnson  
Cr Ex by Goudge

1 Q Now, Mr. Johnson, on page 4, of  
2 your evidence, you refer to, this is a minor point,  
3 but you refer to your wish at the bottom of the page, to  
4 continue the relationship with the land, but through more  
5 modern methods of renewable resource harvesting and non-  
6 renewable resource extraction, which do not permanently scar  
7 the land. It may be premature at this stage, and if it is  
8 please tell me, but I'd be interested in your views on what  
9 you mean by more <sup>modern</sup> methods of non-renewable resource extraction  
10 that does not permanently scar the land.

11 What kind of thing are you thinking  
12 about there?

13 MR. JOHNSON: Mr. Chairman, when we  
14 make that statement, we referred specifically to having  
15 more control placed on development. There's nothing wrong  
16 with development per se because they are an integral part  
17 of the economy, of White Western Economy, and well I reckon  
18 in anybody's economy, but here, okay I refer to large  
19 developments where we'd like to see more and more controls,  
20 regulations and restrictions placed on development so that  
21 we can avoid such things as indiscriminate pollution of the  
22 air, of the waters, surrounding lands, and even such types  
23 of pollution as visual pollution, and sound pollution. I  
24 think essentially that's it.

25 For example, what's been done in Europe  
26 where there have been huge areas of lands that have been



1 strip mined, and huge holes left in the ground. What the  
2 Government has done is replant it, the place, and make a  
3 park out of it with lakes and that kind of thing.

4 I'm not saying we have to go to that  
5 extreme here, I mean the mine could be out in the middle of  
6 nowhere and you wouldn't replant it, let's say, but  
7 essentially I think pollution, you know, having more control  
8 over that kind of thing, like that's -- like pollution is a  
9 scar.

10 Q Finally Mr. Johnson, on  
11 the next page of your presentation, you talk in the first  
12 paragraph of the pipeline necessitating government regulatory  
13 bodies to supervise construction, control land use and  
14 management. Have you given any thought to the possibility of  
15 Indian people through your Organization or otherwise  
16 participating in that regulatory process?

17 A No, we haven't. We haven't been  
18 offered any such opportunity, and we haven't thought of it,  
19 and we can't answer that.

20 Q I see.

21 I think those are all the questions I  
22 have, sir, at this time.

23 MR. CHAIRMAN: Mr. Joe, did you have  
24 anything additional to put to the panel?

25 MR. JOE: No questions.

26 MR. CHAIRMAN: We are wondering, Mr.



1 Goudge, what is proposed for the next presentation by the CYI  
2 and just how that is to be made up?

3 MR. GOUDGE: Well, sir, anticipating it,  
4 I spoke with Mr. Joe about this, and if it is the Board's  
5 desire that Mr. Johnson return and participate in that panel,  
6 he may be doing so anyway, but if it's the Board's desire  
7 that he participate in it, I think that could be arranged.

8 MR. CHAIRMAN: I was simply asking the  
9 question in the context of whether or not the Board will have  
10 a further opportunity to address questions to --

11 MR. JOE: Yes, Mr. Chairman, I believe  
12 that in the second panel, which will be presented by the CYI,  
13 in latter June, or July, or as early in July as Mr. Goudge  
14 would insist, then Mr. Johnson, and perhaps both, Mr. Njootli,  
15 will be available for that second panel.

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1 MR. CHAIRMAN: Thank you. Mr.  
2 Njootli?

3 MR. NJOOTLI: Well yes, sir. We have  
4 this matter of policy that's relating to who will be repre-  
5 senting these 6,000 people who I indicated. There is the  
6 matter of election coming up within our organization on the  
7 27th of this month. So, therefore, I would think that we  
8 maybe returning.

9 MR. GOUDGE: That would conclude,  
10 then the evidence of this panel -- I'm sorry.

11 MR. PHELPS: I just have one question  
12 that might be addressed during your next appearance. That is  
13 there seems to be some confusion as to the exact count of the  
14 Indian people. The 6,000 number and numbers that have been  
15 estimated by other bodies. I'm wondering whether or not you  
16 have any statistics re population, you can give us.

17 MR. JOHNSON: Mr. Chairman, we  
18 reckon between the Yukon Native Brotherhood who represent  
19 the non-status Indian people, the, sorry, the Yukon Native  
20 Brotherhood who represent the status Indian people, the  
21 Yukon Association of Non-Status Indian, and that we represent  
22 in total of approximately 6,000 people. That's just a round  
23 figure. Thus far, in the CYI enrollment figures, we're, you  
24 know, we've enrolled somewhere around 45 hundred, 5,000 people.

25 Q And, do you have any kind  
26 of breakdown for the communities that are along the proposed





1 corridor, the Alaska Highway corridor?

2 A No.

3 Q And, do you have any kind  
4 of estimate of the number of permanent White residents in  
5 the Yukon. Any figures on that?

6 A Well, we have figures  
7 that represent otherwise but we don't have figures that  
8 actually get to that question. Mr. Allmand indicated to us  
9 at a meeting that he had some of his people do a study, and  
10 their study showed that 55 percent of the White population of  
11 the Yukon were here for less than 2 years.

12 Q That's the only study that  
13 you have, is it?

14 A Yes.

15 Q I have no further questions  
16 to add.

17 MR. CHAIRMAN: Thank you very much  
18 Mr. Johnson and Mr. Njootli for your presentations.

19 MR. GOUDGE: I wonder, sir, if the  
20 panel could stand down and we might stretch our legs for about  
21 3 minutes and ask Mr. Templeton if could collect his panel so  
22 that we could move on with them before lunch, if that suits  
23 you.

(WITNESSES ASIDE)

24 MR. CHAIRMAN Is that alright with  
25 you Mr. Templeton? I take it, I see your nodding your head.  
26 A very brief stretch --



1 PROCEEDINGS RESUMED PURSUANT TO ADJOURNMENT

2 DR. RAY ENGLAND: Sworn

3 MR. IRVING FOX: Sworn

4 MR. WINSTON MAIR: Sworn

5 DR. GORDON NELSON: Sworn

6 MR. CARSON TEMPLETON: Sworn

7 MR. CHAIRMAN: We will reconvene.

8 MR. GOUDGE: Yes, sir, we are pre-  
9 pared to resume. While the panel is being sworn in by Ms  
10 Hutchinson, I should indicate to you that this is the Alaska  
11 Highway Pipeline panel, chaired by Mr. Templeton. You have  
12 with you the document entitled, "Initial Environmental Evalu-  
13 ation of the Proposed Alaska Highway Gas Pipeline, Yukon Terri-  
14 tory". That is a thick book. As well, there is an outline and  
15 schedule of presentations to the inquiry.

16 (OUTLINE & SCHEDULE, PRESENTATION TO ALASKA HIGHWAY PIPELINE  
17 INQUIRY BY ALASKA HIGHWAY PIPELINE PANEL MARKED EXHIBIT 32)

18 (INITIAL ENVIRONMENTAL EVALUATION OF THE PROPOSED ALASKA  
19 HIGHWAY FOR PIPELINE, Y. T. MARKED AS EXHIBIT 33)

20  
21 MR. TEMPLETON: Mr. Chairman and  
22 Commissioners, at the far end of the table from me is Dr. Ray  
23 England, who is Principal of Inter-disciplinary Systems, who  
24 did the socio-economic studies for the panel. Then, Irving  
25 Fox, Mr. Winston Mair, Dr. Gordon Nelson, and my name's Carson  
26 Templeton.



England, Fox, Mair, Nelson, Templeton  
In Chief

1 I guess we'll put these name plates  
2 up so that you can remember who we are.

3 Mr. Chairman, I will follow through  
4 the summary and outline, which I believe you have, and I'll  
5 try and condense it as much as I can, because I know you're  
6 short of time and we'll start, perhaps, on the middle of  
7 Page 2 and mention that this panel is a non-constituted panel.  
8 It has no authority and although it is funded by Foothills  
9 Pipe Lines, we do not present Foothills' case, Foothills pre-  
10 sents its own case.

11 The Panel was established to study  
12 and report on the physical, biological and human environmental  
13 implications of the construction and operation of the proposed  
14 Alaska Highway gas pipeline in the Yukon. The Panel, which is  
15 composed of a group of scientists and engineers experienced in  
16 northern matters, has taken as its primary role the achievement  
17 of a reasonable degree of environmental protection during the  
18 planning, implementation and eventual shutdown of the Alaska  
19 Highway gas pipeline.

20 The primary goal of the Panel is  
21 to maintain or achieve environmental protection on any proposed  
22 Alaska Highway gas pipeline route. To achieve this goal, the  
23 Panel will: determine the nature of the physical, biological,  
24 and human environments that might be potentially affected;  
25 determine the kinds of changes likely to occur and express  
26 them publicly, advise on what mitigative and control measures



1 should be instituted to achieve environmental protection; and  
2 advise against construction of a gas pipeline should the Panel  
3 decide that mitigative and control measures would not  
4 achieve the primary goal.

5 The terms of reference provide for an  
6 autonomous panel, and that the members decide what should be  
7 studied, what research should be conducted and what conclusions  
8 should be drawn. Specifically, these terms of reference in-  
9 clude the following: the Panel will be free to study in re-  
10 spect of environmental considerations including human and  
11 community factors, whatever in its judgement it deems neces-  
12 sary to achieve its goal. The Panel will report publicly, all  
13 materials and opinions as the studies progress.

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England, Fox, Mair  
Nelson, Templeton  
In Chief

1                   The sponsor does not have the  
2 right to preview or edit the reports or opinions of the panel  
3 but shall be provided with such reports or opinions four  
4 weeks prior to publication.

5                   The panel will submit annually or  
6 semi-annually, a budget for the approval of the sponsor. The  
7 sponsor or the panel can terminate the arrangement at any  
8 time by giving one month's notice. If the termination is by  
9 the panel, it will deliver all its findings to the sponsor.  
10 The sponsor terminates the arrangement, the panel will put  
11 its studies into interim report form and deposit them in a  
12 library so that the information will not be lost.

13                   The sponsor will pay for reasonable  
14 run-down costs. The members of the panel are:

15           Irving K. Fox, Director of the Westwater Research  
16           Institute Professor of Regional Planning, University  
17           of British Columbia,  
18           W. Winston Mair, Consultant-Enironment, Land Use and  
19           Indian Socio-Economic Development,  
20           Ian McTaggart-Cowan, Professor of Zoology and former  
21           Dean of Graduate Studies, University of British  
22           Columbia.

23 I'm sorry, Dr. McTaggart-Cowan couldn't attend. He had a  
24 previous meeting of which he was Chairman set up, but he has  
25 participated throughout all our studies.

26           J. Gordon Nelson, Dean of Environmental Studies,



England, Fox, Mair,  
Nelson, Templeton  
In Chief

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University of Waterloo, and  
Carson Templeton.

The scope of the Panel's work was to address project-related problems that have ramifications in the physical, biological and human environments. The physical environmental issues relate to water, land and air. The biological environmental issues relate to mammals, birds, fish and vegetation. The human environmental issues related to life patterns, local economy, infrastructure and man/land heritage, namely parks, reserves, sanctuaries and archaeological-historical sites.

Our overall approach contained the following major steps:

- The selection of the major environmental aspects or parameters for study.
- Development of relative importance values for these parameters.
- Identification of potential project and environmental interactions.
- Estimation of potential magnitude of change.
- Development of environmental assessment indices.
- Preparation of initial environmental evaluation.
- Determination of controls, mitigative measures and site specific recommendations, and
- The preparation of final environmental assessment.

And then,



England, Fox, Mair,  
Nelson, Templeton  
In Chief

- 1           - Development of a comparison assessment of the MacKenzie  
2           Valley versus the Alaska Highway for the transmission  
3           of Alaskan gas.

4       And then,

- 5           - The design of environmental controls and procedures  
6           for the project.  
7           - And prepare and present findings at hearings as  
8           appropriate.

9                               At this point, we have completed  
10       our initial environmental evaluation of the proposed project  
11       and are well advanced with a preliminary environmental  
12       comparison of the Mackenzie Valley and Alaska Highway routes  
13       north of 60.

14                           MR. HOLLINGWORTH:       Mr. Templeton,  
15       excuse me, on the page previous in your prepared evidence,  
16       you have -- in prepared evidence, a statement saying that  
17       you're involved with the estimation of probability of change  
18       occurring and you didn't read that just now. Did you delete  
19       that intentionally?

20                           A               Where are you, Mr.  
21       Hollingworth?

22                           MR. HOLLINGWORTH:   Page 5 of your prepared  
23       evidence.

24                           A               Oh, he says I didn't --  
25       the estimation of probability of change occurring?

26                           MR. HOLLINGWORTH:   That was meant to be in-



England, Fox, Mair,  
Nelson, Templeton  
In Chief

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1 cluded, was it?

2 A Yes it was.

3 MR. HOLLINGWORTH: Thank you sir.

4 A I'm sorry. We will be  
5 developing site specific recommendations in an environmental  
6 atlas, controls in the form of a code for the project and  
7 the mechanisms for implementing the necessary control  
8 measures. These are fundamental to realizing protection,  
9 should the project proceed.

10 Notwithstanding this plan, consider-  
11 able difficulty confronts us on human environmental matters  
12 because of the scarcity of the data in this area and I should  
13 mention that the -- we use the human environment in much the  
14 same way as many people use the socio-economic.

15 The purpose of this presentation  
16 is to acquaint you, the Commissioners, with the findings  
17 and opinions we have reached in our studies of the proposed  
18 project thus far. We will try to put the issues before you,  
19 into perspective in context of the issues involved in a  
20 national decision, of whether a pipeline through the Western  
21 Arctic -- whether to build a pipeline through the Western  
22 Arctic and if so, upon what route.

23 Then we would like to touch very  
24 briefly on the summary of the impacts of the biological,  
25 physical environments and then discuss the main part of  
26 this presentation, the human environment.







England, Fox, Mair,  
Nelson, Templeton  
In Chief

1                   In presenting the initial environ-  
2                   mental evaluation of this project, we will draw heavily on  
3                   the Alaskan experience with the Alyeska project, and then  
4                   indicate the problems we can anticipate in the Yukon  
5                   Territory if the project proceeds and present our initial  
6                   recommendations for minimizing negative impacts and enhancing  
7                   potential positive impacts.

8                   Finally, we will express our  
9                   opinions on the absolute necessity to develop controls for  
10                  the project similar to those now existing in the physical  
11                  and biological areas as codes and regulations with appropriate  
12                  organizational mechanism to ensure compliance by the pipeline  
13                  company with these controls.

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1                               Next I would like to deal with the  
2       grouping of the issues of a national decision on a gas  
3       pipeline through the Western Arctic.

4                               I think we're all faced with the  
5       prospect that a decision is going to be made this Fall, and that  
6       we should look at what are the national issues, because  
7       these probably will be the issues on which the decision is  
8       made. Perhaps it might be useful to consider these in this  
9       light, so that we can concentrate more on the national issues.

10                              Of course, our experience is not that  
11       complete in national issues, but we feel it's worth presenting,  
12       and perhaps others might weigh them differently than we do.

13                              MR. CHAIRMAN: Mr. Templeton, before  
14       you start, I note that your time estimate for this section  
15       of the submission is about half an hour. I wonder if it  
16       mightn't be preferable, since we're very close to twelve  
17       thirty to adjourn at this point and recommence sharp at  
18       two o'clock.

19                              MR. TEMPLETON: Yes, that will be  
20       fine, I'll try and cut it down to about fifteen minutes, but  
21       still I think this would be a good time to break.

22                              MR. CHAIRMAN: Thank you.

23                              Mr. Goudge, do you have something to  
24       say before we rise?

25                              MR. GOUDGE: One thing, sir, I'm  
26       afraid I might be asking the Board and prevailing on others



England, Fox, Mair, Nelson, Templeton.  
In Chief

1 to contemplate sitting this evening, so we'll see how we get  
2 along this afternoon, but I'd be grateful would begin to try  
3 and get used to that idea.

4 MR. CHAIRMAN: Thank you, I think, Mr.  
5 Goudge.

6 PROCEEDINGS ADJOURNED  
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1 PROCEEDINGS RESUMED PURSUANT TO ADJOURNMENT

2 MR. CHAIRMAN: Mr. Goudge, I see our  
3 panel is complete and ready to go. Is there anyone who is  
4 not here, as far as you know, any reason why we should not  
5 proceed?

6 MR. GOUDGE: ' Not as far as I can tell,  
7 sir, I think if Mr. Templeton is prepared to resume and the  
8 Board is ready, perhaps we can continue.

9 MR. CHAIRMAN: Mr. Templeton, whenever  
10 you are ready.

11 MR. TEMPLETON: The Item 2 on the  
12 Agenda is the grouping of issues of a national decision on a  
13 gas pipeline through the Western Arctic. We have prepared  
14 a handout which is on the rear table if anybody wants to  
15 follow it, because sometimes on these list of items, it's  
16 a little difficult to see where we're talking about. I  
17 think there's enough there for everyone.

18 Before presenting our initial  
19 environmental evaluation of the proposed Alaska Highway  
20 Pipeline, we thought it might be useful to look at how the  
21 environmental issues fit with the other issues in the  
22 Canadian decision of a gas pipeline through the Western  
23 Arctic. Our understanding is that you've been asked to  
24 report on your initial findings on the socio-economic issues  
25 to the Government of Canada by August 1st.

26 Dr. Hill has been asked to report his





1 findings on the natural environmental issues of the Alaska  
2 Highway route by August 1st. We understand further that the  
3 National Energy Board will be reporting on the engineering  
4 and economic aspects of the Canadian Arctic Gas proposal, the  
5 Foothills Maple Leaf Proposal, and the Foothills Alaska Highway  
6 Proposal at the same time.

7 Mr. Justice Berger has already presented  
8 Volume 1 of his report on the environmental and social aspects  
9 of the CAGPL and Maple Leaf proposals. Thus all of these  
10 findings will come together about August 1st and presumably  
11 the Cabinet will then make its decision.

12 The Cabinet's decision is not an  
13 enviable one, because the Reports are on different projects  
14 or on different degrees of refinement of one project. It  
15 will be further complicated by differences in the level of  
16 detail between each of these inquiries and also by the many  
17 route and project changes that have occurred in the course  
18 of the inquiries.

19 For example, late in 1975 in the middle  
20 of the Berger Inquiry and the National Energy Board hearings,  
21 over one half of the CAGPL route was changed, including the  
22 crossing of the Mackenzie Delta. In the past month and a half  
23 the Alaska Highway route has been changed as to pipe size,  
24 compressor station locations, the length of the chilled  
25 section and a relocation of 500 miles of route in B. C. and  
26 Alberta. These changes are going to make the job a lot



1 tougher for Cabinet and they could also complicate your  
2 work.

3 We therefore believe you would be  
4 well advised to assume that the proposed pipeline route  
5 which you are considering will be revised as detailed planning  
6 proceeds and we recommend to you the value of looking at the  
7 issues, and the impacts upon those issues in a broader  
8 context than in the terms of the exact route alignment and  
9 the location of facilities now proposed.

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26 These are the issues that will, in our opinion, figure promin-



Under each heading there will be a number of sub-issues, and of course each must be weighted as to its national importance. It is not easy to weight the national importance of "barren-ground caribou" versus "effect on inflation", but, when the actual decision is made this will have to be done, whether consciously or unconsciously.

20 The methodology for arriving at  
21 these preferences is similar to the methodology for arriving  
22 at the environmental index explained in the Introduction and  
23 Approach chapter of our Initial Environmental Evaluation re-  
24 port. A subsequent report will develop it more fully.

25

26







England, Fox, Mair,  
Nelson, Templeton  
In Chief

1 Now, I would like to provide a  
2 breakdown of the environmental issues.

3 As I mentioned earlier, they can  
4 be grouped under physical, biological and human environments.  
5 We realize that your terms of reference are to concentrate  
6 on the socio-economic issues which can be considered the  
7 same as what we call the "human environment" in our report,  
8 but the human, biological and physical groupings are inter-  
9 twined.

10 On Page 4 of the handout which is  
11 available, we show a diagram of the environmental component  
12 of the National Decision. The size of the segment represents  
13 the relative importance, in our opinion, of the various sub-  
14 components. That's not impact, that's just the importance.  
15 The bigger the segment, the more important the component in  
16 the national decision of a gas pipeline through the Western  
17 Arctic. For example, look at the outer ring of the sub-  
18 components in Level C: Life patterns is rated more important  
19 than mammals and mammals are rated considerably more important  
20 than water or air.

21 And now, we would like to discuss  
22 very briefly, the biological and physical components before  
23 going onto the Human Environment.

24 When we examine the biological  
25 environment, we found that certain species of mammals, birds  
26 and fish were at issue because of their population status,



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1 susceptibility to disturbance, adaptability or their use by  
2 man. Thus, a list of biological components at issue was  
3 drawn up and is presented here so that we can build a total  
4 perspective of the pipeline route decision.

5 It should again be pointed out that  
6 these are identified without any particular gas pipeline in  
7 mind. Rather the listing relates to the regional setting  
8 in which the National Decision on a pipeline route must  
9 be made. The list is reproduced on Page 5 of the handout  
10 and I won't repeat it here.

11 In a similar manner, we have iden-  
12 tified the following as being the issues for the physical  
13 environment and these are listed on Page 6 of the handout.  
14 That includes the land, water and air.

15 With regard to Human Environment,  
16 we have listed on Page 6 of the handout, the breakdown of  
17 this segment into life patterns, local economy, man/land  
18 heritage and infrastructure.

19 The Life Pattern issues relate to  
20 the personal and collective social and economic well-being  
21 of people. Concern for the population's ability to maintain  
22 cultural integrity and satisfy fairly basic needs and wants  
23 within a healthy and secure environment is implied. Thus,  
24 acculturation, public safety, public health, cost of living,  
25 subsistence, employment and recreation are the specific  
26 issues we identified under Life Patterns.



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1                                   The local economy issue relates to  
2     the stability and opportunities for local business and in-  
3     dustry, rather than employment and income opportunities.  
4     Accordingly, tourism, trapping, commercial fishing, mining,  
5     planned land use, forestry and service and retail are the  
6     issues we identified within the category of local economy.  
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1                   The Infrastructure issues arise from  
2 concern that the project activities might result in increased  
3 infrastructure costs or overburdening of existing capacity,  
4 thus impairing the quality of the service available to resi-  
5 dents. Specifically, the issues relate to planning, education,  
6 transportation, municipal services, and communications.

7                   The Man/Land Heritage issue relates  
8 to archaeological and historic sites, national parks, special  
9 areas and certain aesthetic values. The value of this heri-  
10 tage has, in many instances, been formally recognized through  
11 designation of an area. The central issue here is that the  
12 social and cultural value of these resources be protected.

13                   On Chart 7 of the handout, we demon-  
14 strate graphically how we weight the relative importance of  
15 the Human Environment components with each other in the  
16 Pipeline Decision.

17                   This weighting is essential in order  
18 to separate out those items that are significant in the deci-  
19 sion. We are not commenting on their absolute importance,  
20 only the importance in the national Pipeline Decision.

21                   Now that we have shown where and how  
22 we weight the various issues and our biases, the other members  
23 of the Panel will discuss in summary form the biological and  
24 physical issues and the first one is the Physical Environment,  
25 Dr. Nelson.  
26







1 DR. NELSON: This is a summary for  
2 the Physical Environment.

3 The proposed Alaska Highway gas pipe-  
4 line is designed to transport natural gas from Prudhoe Bay in  
5 Alaska, through Canada, to United States markets. The Yukon  
6 section of the system will generally follow the existing Alaska  
7 Highway from Beaver Creek, Yukon to Yukon-British Columbia  
8 border near Watson Lake, Yukon.

9 This initial environmental evaluation  
10 reviews, for the Yukon section of the proposed pipeline,  
11 the existing physical, biological, and human environmental  
12 settings, identifies major environmental problem areas, and  
13 provides preliminary recommendations for control and mitigative  
14 measures. The Highlights of this evaluation are as follows:  
15 with respect to Water. Sedimentation, water quality, ground  
16 and surface water regimes were selected to express changes in  
17 the water component of the environment during pipeline construc-  
18 tion and operation. Project-induced sediment in varying  
19 amounts could potentially affect up to 280 kilometers, or  
20 8 per cent of the length of streams and rivers crossed in the  
21 pipeline corridor. Potential sedimentation could be reduced 20  
22 to 40 per cent with effective controls. Water quality changes,  
23 resulting from wastewater discharges could potentially effect  
24 two to three per cent of the streams and rivers crossed; how-  
25 ever, this affect can be reduced approximately 50 per cent with  
26 effective controls and mitigative measures. Downstream use of



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1 groundwater could potentially be affected by spills in fourteen  
2 per cent of the drainages crossed, but effective controls  
3 could reduce this potential to about three per cent. Effective  
4 controls for the surface water regime could reduce the poten-  
5 tial alteration of seventeen lakes and up to ten per cent of the  
6 65 streams and rivers by approximately 50 per cent. During  
7 operation, relatively minor changes to water are expected,  
8 but sub-surface drainage interruption could be affected on  
9 about two per cent of the route by the chilled pipeline.



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1                   With respect to land, the potential  
2 for change to the land component was assessed in terms of  
3 permafrost, erosion and slope instability. Thaw settlement  
4 exceeding one-third of a metre could occur over 9 per cent  
5 of the right-of-way prior to startup. Effective controls in  
6 permafrost regions during construction, will reduce thaw  
7 settlement by one-third to about five per cent of the right-  
8 of-way. Thaw settlements will increase during operation  
9 and could exceed one-third of a metre over 20 per cent of  
10 the right-of-way.

11                   Construction activities are expected  
12 to increase sediment resulting from erosion by about 0.1  
13 per cent, however, this increase will be largely mitigated  
14 within three to five years with implementation of an effective  
15 revegetation plan. Approximately 6 km of slopes in perma-  
16 frost regions exist along the right-of-way at inclinations  
17 which may become unstable during construction. An additional  
18 1 km of slopes could become unstable during operation. Re-  
19 routing, minimizing surface-cover disturbance and trans-  
20 mitting gas at 5 to 10°C east of Milepost 40.8 will reduce  
21 potential slope instability problems by about 70 per cent.  
22 Seismicity, frost heave and heaving pressure are environmental  
23 hazards to pipeline integrity which must be considered in  
24 design.

25                   With respect to air; air quality  
26 and microclimate were selected to assess project effects on





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1 air. Construction activities will affect less than one per  
2 cent of the air quality and microclimate in the proposed  
3 corridor, however, localized problems dependent on meteorol-  
4 ogical conditions are expected. The effectiveness of controls  
5 in reducing regional changes in air quality and microclimate  
6 during operation will be minor; but emission, particularly of  
7 nitrogen oxides, from five of the seven compressor stations  
8 could cause considerable local impact.

9                                 These sites will be subject to high  
10 ground level concentrations of atmospheric contaminants due  
11 to low wind speeds and inversions. Because no practical  
12 mitigative measures are currently available for controlling  
13 these emissions, compressor station location is the primary  
14 mitigative measure available to minimize local impact.

15                                 MR. TEMPLETON:         And now, Mr.  
16 Mair will give a summary of the biological environment.

17                                 MR. MAIR:             Mr. Chairman and  
18 Commissioners, before I commence the report, I'd like to  
19 take this opportunity and express my regret that Dr. Ian  
20 McTaggart-Cowan couldn't be here as you'll note from

21             the copy you have, he intended to present this. I'll do  
22 the best I can to stand in for him but I don't pretend to be  
23 able to match up to his outstanding capabilities.

24                                 In the area of mammals, eight groups  
25 of mammal species were selected to assess potential pipeline  
26 related changes to the mammal component. These are Dall's





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1 sheep, grizzly bear, wolverine, wolf, woodland caribou,  
2 wapiti and mule deer, moose and aquatic furbearers.

3 Pipeline related construction  
4 activities could result in changes to the amount and the  
5 quality of habitat available, increases in direct and in-  
6 direct mortality and increases in adverse human-animal inter-  
7 actions.

8 Dall's sheep, grizzly bears and  
9 woodland caribou are most likely to experience adverse  
10 changes as a result of construction related activities. Of  
11 these, Dall's sheep have the highest potential for adverse  
12 changes and could withdraw from as much as 14 per cent of  
13 year-round habitat in the proposed corridor during pipeline  
14 construction.

15 Grizzly bears will be subject to  
16 some construction-related disturbance and the loss of a small  
17 amount of foraging habitat; however, there is a high  
18 probability of a major increase in human-bear interactions  
19 at construction facilities and an increase in sport-hunting  
20 demand.

21 Woodland caribou could temporarily  
22 withdraw from approximately 4 per cent of the available  
23 habitat during pipeline construction. The effects on moose  
24 and aquatic furbearers will be less and wapiti, mule deer  
25 wolverine and wolf are expected to experience the fewest  
26 project-related changes.



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1 Recommended controls and mitigative  
2 measures could reduce the overall potential effects on  
3 mammals by approximately two-thirds, primarily as a result  
4 of reductions of potential effects on Dall's sheep, grizzly  
5 bears and woodland caribou. Controls are less effective in  
6 reducing potential change to furbearers. Changes affecting  
7 mammals during the operational phase are expected to be  
8 relatively minor and readily amenable to mitigation.

9 Birds; eleven groups of bird species  
10 - peregrine falcons, ospreys, gyrfalcons, golden eagles,  
11 trumpeter and whistling swans, bald eagles, sandhill cranes,  
12 Canada geese, dabbling ducks, diving ducks and sharp-tailed  
13 grouse - were selected to assess the potential changes to  
14 bird populations resulting from pipeline construction and  
15 operation.

16 I should just like to comment, Mr.  
17 Chairman, that I am also trying to represent Dr. Cowan that  
18 although it's not been included in this listing, nor in the  
19 handout, there is a concern with respect to certain rare and  
20 endangered species which we have -- we needn't go into,  
21 particularly at this point, but which is a concern to be  
22 borne in mind when they start making comparisons between  
23 routes at some later date.

24 Of these, peregrine falcons, ospreys,  
25 trumpeter and whistling swans and bald eagles, are most likely  
26 to be affected by pipeline activities.



The presence of people and equipment during construction, represents the greatest potential source of disturbance to raptorial birds and water fowl. Swans and tree-nesting raptors will be affected to a lesser extent by right-of-way development, resulting from fuel and toxic material spills.



Scheduling of project activities to avoid critical areas during prescribed bird-use periods is regarded as the most effective mitigative measure for all species. Minor relocation of proposed facilities and re-alignment of the right-of-way at specific sites will eliminate many potential conflicts. Disturbance from aircraft and presence of people and equipment cannot be completely avoided; however, the effects of these activities will not endanger bird populations given proper controls. Institution and enforcement of these recommendations during the construction period can reduce potential effects on the selected species by approximately 60 percent, and are particularly effective in reducing conflicts with peregrine falcons, swans, ospreys and bald eagles. Aircraft overflights and compressor station noise were identified as sources of potentially minor conflicts during operation. The other selected species gyrfalcons, golden eagles, sandhill cranes, Canada geese, dabbling and diving ducks, and sharp-tailed grouse will not be affected to any significant degree by the project.

#### Fish

Six species were selected to assess potential pipeline-related changes to the fish component: chinook salmon, chum salmon, Dolly Varden, lake trout, whitefish, and arctic grayling. Sedimentation at stream crossings is the major potential source of impact on fish populations and was used to express potential magnitude of change on the







1 the selected species. Additional project-related effects  
2 include disruption of critical fish activities; increased  
3 mortality resulting from toxic spills, blasting, and sport  
4 harvest; or disruption of unique fish habitats.

5 An estimated 3 to 10 percent of  
6 available fish habitat in the corridor could potentially be  
7 degraded by varying amounts of siltation, which will be mini-  
8 mized within a 3-year period following construction. I think  
9 it was stated earlier, given proper revegetation and  
10 so on. Most of the silt deposited in streams and rivers will  
11 be washed downstream by floods and spring spate in 1 to 4  
12 years; however, restoration of lake habitat will take much  
13 longer. Recommended controls and mitigative measures can  
14 reduce potential habitat degradation by nearly one-half.  
15 Few additional effects on fish populations are expected during  
16 pipeline operation if repair and maintenance activities are  
17 properly controlled.

18 Vegetation

19 Eight vegetation types were selected  
20 to assess the potential for change to the vegetation compo-  
21 nent: they are grasslands, alpine tundra, wetlands, riparian  
22 vegetation, pioneer communities, lodgepole pine, mixed-woods,  
23 and mature spruce forest. If I may refer again to the hand-  
24 out to the grouping of environmental issues the listing of the  
25 vegetation, mammals, birds, et cetera tender vegetation, that should  
26 be pioneer grass, herbs, shrubs, it's just a --



In Chief

1 Of these, only grasslands, the rarest type, will experience  
2 a loss of more than 1 percent of their area within the propo-  
3 sed corridor. All others will experience less than 0.5  
4 percent loss.

5 Although potential changes in  
6 vegetation are relatively low on a regional scale, taking  
7 the total area into account, and to a great extent unavoidable,  
8 rerouting is recommended to avoid specific grassland and  
9 alpine tundra areas. Recommended controls and mitigative  
10 measures will have a relatively small effect on reducing  
11 regional vegetation changes; however, these controls are  
12 particularly important to prevent unnecessary site-specific  
13 impact. Fires have historically influenced the southern  
14 Yukon vegetation. Fires originating from summer construction  
15 activities could threaten important areas, and fires origina-  
16 ting off the right-of-way could threaten pipeline construction.  
17 Right-of-way management has the greatest potential for causing  
18 long-term vegetation effects. Blanket right-of-way spraying  
19 should be prohibited, and vegetation management programs should  
20 be designed to encourage stable, low-shrub communities resistant  
21 to tree invasion.

22 MR. TEMPLETON: Mr. Chairman, I  
23 don't think you should pay too much attention to Mr. Mair's  
24 efforts at saying that it was Dr. McTaggart-Cowan's work,  
25 that he didn't know anything about it. He was Chief of  
26 the Canadian Wildlife Service for 11 years, in similar--



1 or in the Parks Service, so I think he can answer the question.

2 Next section is on the Human  
3 Environment. Mr. Fox.

4 MR. FOX: Four major components -  
5 life patterns, local economy, man/land heritage, and infra-  
6 structure, were selected to assess potential effects of  
7 pipeline construction and operation on the human environment.  
8 The approach involved a review of the Alaskan pipeline expe-  
9 rience with respect to these components, and judgments re-  
10 garding applicability of that experience to the Yukon setting.  
11 And I think this should be emphasized as the basis that was  
12 used in making this analysis.

13 It was concluded from this preliminary review that  
14 much of the adverse social and economic impact which charac-  
15 tarized construction of the Alyeska pipeline can be avoided  
16 in the Yukon with proper planning and controls. The pipeline  
17 project, while having considerable potential to adversely affect  
18 the Yukon also presents an opportunity to improve the status  
19 quo. Innovative and effectively managed planning and control  
20 mechanisms are critical to minimize adverse impacts, a Plannig  
21 and Administrative Group, incorporated into an overall go-  
22 vernment control agency, should be established 2 years prior to  
23 construction. This group would initially develop the ne-  
24 cessary policy objectives, and management strategy for  
25 devising human environmental controls; and subsequently  
26 develop detailed standards, codes and regulatory documentation





1 for the project to be applicable to both government and the  
2 applicant.  
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1                                   The following summaries provide  
2 insight into the potential nature and magnitude of changes  
3 anticipated if effective mitigative measures are not imple-  
4 mented. Since not all aspects of the human environment were  
5 addressed in this initial evaluation, conclusions and  
6 recommendations must be regarded as neither comprehensive nor  
7 definitive.

8                                   With regard to Life Patterns, the  
9 potential for cultural impact exists, with the greatest concern  
10 being the native peoples residing in smaller corridor villages.  
11 Information on attitudes, values and aspirations of native  
12 people in corridor communities is lacking, however, as is  
13 real insight into the way the project is perceived by them.

14                                  An increase in criminal code offences  
15 and consequently an impairment of public safety is anticipated  
16 as a result of pipeline construction activity. The greatest  
17 increase will be in property crimes, but an increase in violent  
18 crime rates is also to be expected. Increases in traffic vo-  
19 lumes and the incidence of impaired driving are likely to occur  
20 during the construction phase; impairment of public safety re-  
21 lated to these factors is apt to be most pronounced in the  
22 vicinity of Whitehorse and Haines Junction.

23                                  An increase in demand for all types  
24 of medical services and facilities should be anticipated as a  
25 result of construction activity. This would constitute a  
26 financial burden to Yukoners and other Canadians and impair the



1 quality of services available to residents. Construction  
2 activity will increase stress in corridor communities and, as  
3 a result, an increase in mental health problems is to be  
4 anticipated.

5                                   An increase in inflation is likely  
6 as a result of project activity. It could offset much of  
7 the gain in nominal incomes realized by Yukoners employed in  
8 the project or in sectors of the economy where wage levels  
9 are most likely to be affected by the project. Persons not  
10 employed on the project or in other sectors of the economy  
11 will most certainly experience a decline in real income.

12                               Some unemployed Yukoners will undoubt-  
13 edly find employment on the project. Employment benefits  
14 accruing to Yukoners will be relatively short-term, however,  
15 and we estimate that the unemployment rate may, as a result of  
16 project activity, decline as little as one percentage point.

17                               With regard to the Local Economy:  
18 Although up to 40 per cent of the Yukon trappers may reside in  
19 corridor communities, only about ten per cent of the 1973-74  
20 fur harvest was taken from corridor traplines. Some impact on  
21 aquatic furbearer habitat is anticipated as a result of fall  
22 and winter construction activity at water crossings. Impact on  
23 aquatic furbearer habitat and consequently populations and  
24 potential harvest is not expected to be widespread or long-term.

25                               Commercial fisheries in the project  
26 corridor are small in terms of production, landed value and



1 market value. Only a relatively small, short-term degradation  
2 of fish habitat, which would be reflected in the fish popula-  
3 tions and, consequently, commercial harvest, is anticipated as  
4 a result of project activity.

5 Man-Land Activity. Regional project  
6 effects on archaeology are expected to be low; but there is  
7 concern at three major areas, along Kluane, Dezadeash-Aishihik  
8 River confluence, vicinity of Champagne and numerous minor  
9 areas. More specific information is required regarding pro-  
10 posed route alignments and facility locations before potential  
11 effects on known sites can be evaluated and before a reasonable  
12 program of archaeological survey and salvage can be planned.

13 The proposed pipeline alignment falls  
14 within the northern boundary of Kluane National Park. The  
15 area traverses, traversed lies at the base of Sheep Mountain,  
16 a unique feature of the Park which is critical winter range for  
17 up to 200 Dall sheep.

18 The pipeline alignment lies within  
19 the boundaries of Kluane Game Sanctuary and the proposed bound-  
20 areis of four ecological reserves. It also crosses the pro-  
21 posed Sheep Mountain-Mount Wallace International Biological  
22 Programme site, as well as the proposed Duke Meadows site, a  
23 unique grassland in the southern Yukon.

24 With regard to Infrastructure:  
25 Transportation facilities are likely to be diverted from their  
26 normal activities during pipeline construction and the cost of





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1 of services is likely to increase as a result of project  
2 activity. Added maintenance costs are also likely to be in-  
3 curred as a result of increased utilization of the transporta-  
4 tion infrastructure.

5 Project activities will result in  
6 added demands for a wide variety of services. Existing govern-  
7 ment planning and administration infrastructure are insufficient  
8 to cope with a major project and will have to be increased  
9 considerably in order to respond effectively to the added  
10 demands anticipated.

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1 MR. TEMPLETON: Now Mr. Chairman, I  
2 think it would be worthwhile spending a few minutes for Mr.  
3 Mair to talk about the overview of the studies on the human  
4 environment.

5 MR. MAIR: Anticipating impact of  
6 construction and operation of the proposed pipeline on the  
7 lives of Yukoners in general and corridor residents in  
8 particular is an important part of this assessment. A  
9 series of recommendations whereby adverse social and economic  
10 impacts can be allayed or averted is necessary. In this  
11 assessment, the Alaskan experience and particularly the  
12 documented impact of the Alyeska pipeline construction on  
13 residents of Fairbanks has been reviewed. Based on this  
14 relevant information we conclude that much of the adverse  
15 social and economic impact which characterized construction  
16 of the Alyeska pipeline can be avoided in Yukon Territory.  
17 To achieve this, however, responsibility for responding to  
18 various impacts must be clearly allocated and considerable  
19 preplanning is required, and I would emphasize that last little.

20 According to Mim Dixon (unpublished  
21 manuscript 1976) who was actively involved in programs  
22 established to monitor impact of Alyeska pipeline project  
23 activity on Fairbanks, the more obvious shortcomings in the  
24 way that project was handled are:

25 Planning: decisions respecting the  
26 Alyeska pipeline project were not made in consultation with



1 communities ultimately most affected by it.

2 As a result and for a variety of reasons,  
3 unjust expectations were placed upon communities like Fairbanks  
4 to cope with project impact.

5 Socio-economic responsibility: industry  
6 assumed no responsibility for addressing social and economic  
7 problems resulting directly or indirectly from project  
8 activity and it was not required or expected of them, and this  
9 was a shortcoming.

10 The human environment: although govern-  
11 ment went to some considerable length, through drafting and  
12 enforcing stipulations, to ensure that responsibility for  
13 allaying or averting adverse project impact upon the physical  
14 and biological environment was clearly allocated to industry,  
15 it neglected to perceive the need for stipulations requiring  
16 an equal degree of responsibility on the part of industry for  
17 the impact its activities would have on the human environment.

18 The "boon" syndrome: the local  
19 business community simplistically perceived the project as a  
20 tremendous boon to business and shortsightedly discouraged  
21 industry from assuming in-house responsibility for many goods  
22 and services. As a consequence an undue burden was placed upon  
23 existing services and supplies and Fairbanksans paid the  
24 price for this indiscretion. Businessmen also discovered  
25 that there were many hidden costs and problems they failed  
26 to perceive. I should add that in fairness too, because



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1 arrangements hadn't been made, and the local businessmen went  
2 ahead and increased their capacity to some degree to handle  
3 the business and then the pipeline was delayed for several  
4 years and that also got them into some difficulties.

5 Assistance: as a result of hearings  
6 pursuant to the granting of a right-of-way, the Federal  
7 government was left with the impression that Fairbanksans  
8 viewed the project in a highly favourable light and perceived  
9 no need for special assistance, with the exception of assist-  
10 ance to ensure that native peoples shared in the benefits  
11 accruing from project activity. Consequently no clear role  
12 was identified for the Federal government and no mechanisms  
13 put in place to ensure a Federal response to special problems  
14 created by the project. As discussed elsewhere in this report,  
15 it is now recognized by the U.S. Department of Commerce  
16 that social and economic costs resulting from projects in the  
17 national interest should be shifted from local and State  
18 governments to the Federal government, and to industry and  
19 ultimately to consumers.

20 Lack of technical and fiscal resources:  
21 although the State of Alaska saw more clearly its  
22 responsibility with respect to social and economic problems  
23 resulting from project activity, it lacked the technical  
24 and fiscal wherewithal to respond as effectively as  
25 circumstances required. The fiscal constraint upon the  
26 State was due to the fact that revenues were not forthcoming





1 until the project was completed.

2                     Dixon concluded that the mistakes made  
3 in response to construction of the Alyeska pipeline need not  
4 be repeated elsewhere and we concur fully with this conclusion.  
5 We also concur with Dixon's conclusion that an essential step  
6 in ensuring that these mistakes are not repeated is the  
7 formulation of broader stipulations clearly allocating  
8 responsibility not only for addressing impact upon the physical  
9 and biological environment, but also for impact on the human  
10 environment.

11                    The socio-economic system within which  
12 any intervention occurs is so incredibly complex that the  
13 full extent of the intervention's impact upon it eludes  
14 assessment. At best, then, one must be content with something  
15 less than a complete assessment of socio-economic impact.  
16 The approach adopted here to come to grips with this problem  
17 has involved progressive disaggregation of the socio-economic  
18 system into ever more discrete and comprehensible units.  
19 Before discussing the process in detail, however, we point  
20 out that via this process a minimal list of social and  
21 economic factors requiring attention was developed. Time  
22 militated against our addressing even this minimal list,  
23 however, and it proved necessary to prioritize within it and  
24 develop a short list of factors to be addressed. The  
25 consequences of this short listing are discussed at a later  
26 point. First a brief discussion of the process by which the  
first list was developed is presented





1                   The purposes of assessment, the  
2 socio-economic system of of first desegregated into four  
3 components, which were in turn desegregated into 22 parameters.  
4 Finally indicators were identified for each parameter (in  
5 Figure 1. As one proceeds from component through parameter  
6 to indicator level, areas of concern are progressively nar-  
7 rowed, the ultimate objective being to identify, at the indi-  
8 cator level discrete factors which can be measured.

9                   Those of you who have this will have  
10 the figures showing them.

11                   The indicator measures collectively  
12 provide a quantified basis for inference respecting impact  
13 magnitude and likelihood at the broader parameter and compon-  
14 ent level.

15                   The four components identified in the  
16 first level disaggregation of the socio-economic system are,  
17 have been stated before, Life Patterns, Local Economy, Man-  
18 Land Heritage and Infrastructure.

19                   The Life Patterns component was  
20 disaggregated into eight parameters all relating to the per-  
21 sonal and collective social and economic well being of people.  
22 And these have been mentioned before. I can just quickly state  
23 them. The acculturation, cost of living, subsistence, public  
24 health, public safety, employment opportunities, income oppor-  
25 tunities and recreation. Implicit in all of the above para-  
26 meter titles is a concern for the population's ability to



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1 maintain cultural integrity and satisfy fairly basic needs and  
2 wants within a healthy, secure environment.

3                                   The Local Economy component was  
4 disaggregated into five parameters all relating to regional  
5 economy. I don't know that I need to repeat them, but simply  
6 state the parameters perspective here is not employment  
7 and income opportunity and benefits to people as in the preced-  
8 ing components, rather it's on business and industry stability  
9 and opportunity.

10                               The Man-Land Heritage component was  
11 disaggregated into five parameters - again, I can - archaeology,  
12 special areas, historic sites, national parks and aesthetics.  
13 The overriding philosophy with respect to these parameters  
14 is that Man-Land Heritage resources should, to the extent  
15 possible, remain inviolate. The main concern here, therefore,  
16 is preparation of guidelines and controls to ensure that  
17 a project is not disturbed or violate these resources, the  
18 social and cultural value of which has in many instances al-  
19 ready been formally recognized through some form of designation.

20                               The Infrastructure component was dis-  
21 aggregated into four parameters: municipal utilities, trans-  
22 portation, communications and planning. The concern with  
23 respect to these parameters is twofold: project activity might  
24 result in increasing infrastructure costs (capital and mainten-  
25 ance and operating) and existing infrastructure capacity might  
26 be overburdened thus impairing the quality of service available



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1 to residents. For purposes of this appraisal, the term infra-  
2 structure incorporates not only capital works designed and  
3 constructed to provide for basic services, but planning and  
4 administrative structures as well.

5                               Once the above parameters were se-  
6 lected indicators were identified. Wherever possible, the  
7 indicators identified are quantifiable measures such as pro-  
8 portion of the population using a particular language as the  
9 most common language of the home, per cent participation in the  
10 wage economy, hospital bed occupancy rates, crime rates, con-  
11 sumer price indices and unemployment rates.

12                           As indicated earlier, time constraints  
13 necessitated focusing upon but a few selected parameters from  
14 the above list. The short list of selected parameters in-  
15 cludes acculturation, public safety, public health, cost of  
16 living and incomes, employment, trapping, commercial fisheries,  
17 archaeological-historic sites, national parks (Kluane National  
18 Park), special areas (ecological reserves and game sanctuaries),  
19 transportation and planning.

20                               Since only a few aspects of the  
21 human environment are addressed, conclusions and recommendations  
22 presented here must be regarded as neither comprehensive nor  
23 definitive and preclude development of an Environmental Asses-  
24 sment Index for the entire Human Environment sections. At  
25 best, our appraisals provide insight into the potential nature  
26 and magnitude of change that might be anticipated if effective





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1 mitigative measures are not devised and implemented. Recom-  
2 mendations presented provide food for thought and indicate  
3 the sort of consideration that must be given to the problems  
4 if effective strategies for allaying or averting impacts are  
5 to be devised.

6                               The pipeline project, while having  
7 considerable potential to adversely affect the social and  
8 economic fabric of Yukon Territory, also presents a unique  
9 opportunity to improve the status quo. However, an innovative  
10 and effectively managed response is necessary to avail of this  
11 opportunity and to minimize adverse impact. We therefore  
12 recommend that a Planning and Administrative group be estab-  
13 lished two years before construction commences to ensure that  
14 opportunities are planned into an adverse impact out of the  
15 development.

16                               In making this recommendation, we  
17 recognize that it is without complete information. The initial  
18 report is not the complete picture. It does, however, provide insight into  
19 the nature and magnitude of social and economic change that  
20 should be anticipated.

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1                   The Planning and Administrative  
2 group should be incorporated into any agency established to  
3 control the project. Initially, this group would develop  
4 the broad policy, objectives and management strategy for the  
5 Human Environment component of the control Agency. Then the  
6 group should develop standards, codes and other regulatory  
7 documentation with which the task will be accomplished.

8                   In doing this, it should be recognized  
9 that the project is not all negative. There are obvious  
10 transitory benefits for Yukoners such as employment, but  
11 there are also long-term opportunities to improve existing  
12 social conditions. Thus, there are both punitive and co-  
13 operative aspects to the control problem.

14                   Specific recommendations made  
15 throughout the Human Environment section, provide insight  
16 into what a human environmental code should include, however,  
17 input from others, particularly those who live and work in  
18 the region, would improve these recommendations.

19                   Finally, the group -- that's the  
20 Planning and Administrative group -- must not only plan, but  
21 must have authority to implement its plans as the project  
22 proceeds. It is for this reason we recommend that the group  
23 be part of an overall government control Agency for pipeline  
24 development.

25                   I should just like to add one  
26 further note. We have had considerable discussions during



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1 the period when we've been doing this work, about what we  
2 termed in loose terms, an advisory committee of local people.  
3 It hasn't appeared in here but I believe that Dr. Nelson meant  
4 we'll be making some comments on it in one of the later  
5 presentations.

6 MR. TEMPLETON: Now, we would  
7 like to go on to the Life Patterns section and discuss how  
8 this was done and Dr. Nelson will give a summary and comment  
9 on the acculturation component.

10 DR. NELSON: It may be somewhat  
11 confusing to follow the unfolding of the material that we  
12 are presenting to you. To clarify your position at the  
13 moment, if you look at the chart on Page 33, you'll see that  
14 through the remarks of Mr. Fox and Mr. Mair, we have dis-  
15 cussed a parameter, socio-economic systems and Mr. Fox in  
16 particular, has made summary remarks on the four major  
17 components.

18 We are now down to the third stage  
19 in our analysis, the parameters, and I will speak to three  
20 of these and Mr. Fox will then speak to others within the  
21 Life Pattern component. The three I will speak to are  
22 culturation, public health and public safety and in each  
23 case at the fourth level, we are trying to discuss those  
24 parameters in terms of some indicator, like language or  
25 culturation or like disease or injury for public health, or  
26 like crime rates for public safety.



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1                   So with respect to acculturation,  
2 each section begins with a summary and comment which directs  
3 certain basic questions to the panelist who is to speak to  
4 this item and then there usually follows a summary statement  
5 which the panelist will normally read and comment on.

6                   With respect to the three questions  
7 under Summary and Comment, on acculturation, what concerns  
8 are encompassed by the term acculturation. Here we are,  
9 addressing ourselves to learn behaviour, to culture, to  
10 modes of living, to lifestyles and to things that are  
11 normally encompassed in those kinds of terms.

12                   Why is it impossible to fully  
13 address this concern at this time? The fundamental and  
14 basic problem is the lack of research and the lack of data  
15 which is in many cases, subscribed as -- circumscribed as to  
16 one or more indicators on a parameter.

17                   What sort of things need to be done  
18 to ensure that potential adverse impact is allayed or averted,  
19 where we refer to various kinds of assistance or other means  
20 of doing this in the summary state.

21                   There is a growing concern about the  
22 impact of large scale northern projects on native cultures  
23 and the social fabric of native communities. The native  
24 population residing within or in close proximity to the  
25 proposed pipeline corridor, is grouped in five communities,  
26 including Whitehorse, where about one-half of the corridor



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1 and native population resides.

2 In the other four communities, Haines  
3 Junction, Teslin, Burwash Landing and Upper Liard, the native  
4 population is comparable or greater than the non-native  
5 population. Estimates of native population vary considerably.  
6 It would appear that native peoples comprise from 9 to 17  
7 per cent of the total corridor population.

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In the absence of information on the attitudes, values, and aspirations of native people in corridor communities, we are unable to address the potential for impact. Nonetheless, it is clear to us that the following must be done: assistance, financial and technical, must be provided native groups to expedite development planning, corridor communities must be fully apprised of the potential for adverse as well as positive project impact and means for mitigating adverse impact and enhancing positive benefits must be devised in consultation with them. A native impact information group representing all corridor communities should be created and provided with the financial and technical assistance required to enable it to examine, first hand, impact from Alyeska project activity on interior Alaska communities.



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1                   Mr. Mair, a moment ago, said that we  
2 had been discussing, and we have discussed at some length, as  
3 we've done this work, the ways in which the native people  
4 might interact with the pipeline project, positively,  
5 negatively, or otherwise.

6                   This proposal for a native impact  
7 information group is only one way of approaching the  
8 problem of interaction. We've discussed things like human  
9 resources, assistance units, we have been concerned about,  
10 if the project goes ahead, providing some mechanism or means  
11 whereby the infrastructure developed in association with any  
12 pipeline would be viable enough to continue to be useful to  
13 the native people in meeting their aspirations, but we still  
14 have a great deal of discussion to do in this regard.

15                  MR. TEMPLETON: Now, we'd like Dr.  
16 England to comment briefly on the studies that were done under  
17 the acculturation heading.

18                  DR. ENGLAND: First, Mr. Chairman, and  
19 Commissioners, I would like to draw your attention to a  
20 typographical error in the initial evaluation report which is  
21 in your possession, on page 514. Three on page 914, after the  
22 colon, assistance, financial and technical must be -- inserted  
23 after that should be "provided native groups to expedite  
24 development planning, corridor communities must be fully  
25 apprised" and the remainder is correct.

26                  MR. CHAIRMAN: I would ask you to let us



1 have that again, if you would please, Dr. England?

2 DR. ENGLAND: Yes. "must be provided  
3 native groups to expedite development planning, corridor  
4 communities must be fully apprised".

5 MR. CHAIRMAN: Thank you.

6 DR. ENGLAND: Now the point has already  
7 been made, in that in addressing the question of acculturation,  
8 we concluded that although a limited amount of information  
9 on the attitudes, values and aspirations of the native  
10 peoples in corridor communities, although a certain amount of  
11 this might be available at a gross level, it certainly was  
12 not available at the community level, and we did not have the  
13 time and did not attempt to gather such information, and  
14 consequently the comments we make we regard as an overview  
15 at best, sketching out a few areas of concern, and we are  
16 sure missing a great many others.

17 In all cases in the parameters in the  
18 first section of this report, we have attempted to review  
19 very briefly the project setting, as best we could from the  
20 available data, and then we reviewed relevant Alaskan  
21 experience, if such was available. With respect to the  
22 acculturation parameter, some of the things perhaps worthy  
23 of note include the fact that between 1971, and 1976 there has  
24 been approximately 33 per cent population increase within the  
25 corridor. About 86 per cent of that population reside in  
26 the community of Whitehorse.



1                   The data on the native populations  
2 within the corridor are available from a number of sources.  
3 We have been unable to reconcile this information from  
4 various sources and the best we would conclude was that  
5 within the corridor, and please bear this in mind we are  
6 talking about the corridor and not the whole of the Yukon,  
7 nativepopulations number somewhere between 1,500 and 3,000.







1                   Within the corridor, the communities  
2 of Burwash Landing, Haines Junction, Whitehorse, Teslin, and  
3 Upper Liard are the communities where the native population  
4 is concentrated. Only two of the corridor settlements where  
5 native population is comparable or greater than non-native  
6 populations, Haines Junction and Teslin have a quasi self-  
7 government status as Local Improvement Districts. The other  
8 two Burwash Landing and Upper Liard are unorganized  
9 communities.

10                   As indicated in the Summary, there is  
11 some evidence to suggest that the pressures of dominant  
12 society have been quite considerable on the native culture  
13 in the Yukon Territory. Consensus data indicates that between  
14 1951 and '71 alone, the number of Yukon residents listing  
15 their mother tongue as Indian decreased by 28 per cent. Also  
16 as indicated earlier, the 1971 census data revealed that only  
17 425 persons in the whole of Yukon Territory use a native  
18 language as the primary language of their home.

19                   The impact upon native populations has  
20 been alluded to in a number of submissions. The point has also  
21 been made that the existing settlement pattern is one that  
22 has been in large measure imposed upon the native peoples  
23 of Yukon Territory, by forces and circumstances beyond their  
24 control.

25                   Participation of the native people in  
26 the Yukon labour force was found also was not well documented.



1 The limited data available did reveal very high unemployment  
2 rate for employable Indians. These findings are consistent  
3 with data reported and studies of Indian employment in Canada  
4 generally. One cannot wonder, we feel, whether there will  
5 be real project employment opportunities, even of a  
6 transitory nature for native peoples, unless concerted  
7 effort is made to facilitate their participation.

8 The applicant proposes to establish  
9 operations headquarters in Whitehorse and to locate operations  
10 and maintenance personnel in the communities of Beaver Creek,  
11 Haines Junction, Whitehorse, Teslin and Watson Lake.

12 Of particular concern, with respect to  
13 these issues, or this issue rather, is that the proponent  
14 suggests that there would be a 2.3 to 1 population to labour  
15 ratio prevail in these communities. This would mean  
16 population increases in the order of 44 per cent for a  
17 community like Beaver Creek, 14 per cent for Haines Junction,  
18 15 per cent for Teslin, and 4 per cent for the Watson Lake,  
19 Watson Lake Airport, Upper Liard area. Now the potential  
20 implications of the population increases of this magnitude  
21 on the social fabric of these communities is unknown, and as  
22 is, how the communities would view an influx of this  
23 magnitude. We do feel that in a large measure the projects  
24 ultimate impact on native peoples may very well depend on  
25 the degree to which their initial perception of it is  
26 negative or positive. To a certain extent this will undoubtedly



1 be influenced by how it is viewed in it's relation to  
2 unsettled land claims, and the extent to which it is seen as  
3 a source of enduring benefits. If out of ignorance, and  
4 by ignorance I mean lack of knowledge, people fear the project  
5 and what it may do, or if they have unrealistic expectations  
6 of it, the probably for adverse social impact is surely  
7 enhanced.

8 With respect to the Alaskan experience,  
9 we would point out that as there was a Fairbanks, North  
10 Star Burrough impact information centre, so there was a  
11 rural impact information program which was organized and  
12 run under the auspices of a Fairbanks Town and Villages  
13 Association and funded by the Alaska Department of Community  
14 and Regional Affairs.

15 The rural impact information program  
16 published a number of reports, but they do not provide as  
17 much data on impact on interior Alaska communities, as was  
18 available from the impact information centre for Fairbanks.  
19 Logistical problems in financing militated against effective  
20 liaison with many of the scattered communities in the  
21 interior of Alaska.

22 Therefore, we have had to rely upon  
23 the insights of the co-ordinator of the rural impact  
24 information program in Alaska, with respect to impact of that  
25 project on rural Alaskan communities. These are some of the  
26 impacts that were suggested to us.





1                   With respect to leadership, the village  
2 leaders, being generally among the more capable people in the  
3 community, were best able to compete for pipeline jobs and  
4 tended to be drawn off by pipeline activity, and in their  
5 absence, some communities were quite unable to carry out the  
6 basic functions necessary to acquire their normal operating  
7 funds, carry on on-going programs.





Minority hiring provisions for employment on the Alyeskan pipeline undoubtedly ensured a much greater participation by Native people than would otherwise have been the case. The extent to which this greater participation altered life styles or values, however, is unknown. Detailed data have been compiled on Native participation in the Alyeska project, but follow-up studies to document the changes in orientation and how people's lives were affected as a result of that experience has not been carried out.

MR. CHAIRMAN: Does that conclude your submission, Dr. England?

MR. TEMPLETON: The submission



1 acculturation component is on page 7 of that handout  
2 applying to the Human Environment, and the next component is  
3 Public Safety. And Dr. Nelson will talk about that.

4 MR. CHAIRMAN: I wonder if just  
5 before we get launched on that, I could ask you one small  
6 question, Dr. England. Looking at page 41 of the material  
7 there, where you list the communities. No mention is made  
8 of Beaver Creek. And we didn't catch your reference either  
9 in your verbal submission to Beaver Creek. Was there a reason  
10 for that?

11 DR. ENGLAND: I believe I mentioned  
12 it at one point, Mr. Chairman, however, I was concentrating  
13 basically on communities where Native population was com-  
14 parable or exceeded the non-native population in numbers and  
15 it is my understanding that that is not the case in Beaver  
16 Creek; that Beaver Creek is primarily a maintenance Government  
17 center, or a border crossing point, etcetera.

18 MR. CHAIRMAN: Okay.

19 DR. NELSON: With regard to public  
20 safety, how is the term being used here? In using the term  
21 "public safety", we are referring to security of person and  
22 property. What conditions may be aggravated by project ac-  
23 tivity? And what may be the consequences? The focus in our  
24 analysis is on increase in incidents in rate of criminal  
25 offences, property, violence, increase in traffic offences,  
26 particularly impaired driving, influx of criminals, and  
possible organized crime, increase in juvenile crime. The



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1 consequences relate to the quality of life, and have cost  
2 implications.

3 What types of mitigated measures  
4 may be required? These are referred to in the Summary I will read  
5 and they will be touched upon by Dr. England in his following  
6 discussion.

7 "SUMMARY - Available data show Yukon Territory crime  
8 rates to be considerably higher than the national  
9 average. A situation characteristic of northern areas  
10 as indicated by the comparably high crime rates for  
11 Northwest Territory. Higher crime rates in Yukon  
12 Territory are probably attributable in part to factors  
13 such as the relative youth of the population, high  
14 mobility of the population, and the above-average  
15 level of alcohol consumption. Fairbanks experienced  
16 a dramatic increase in property crimes as a result of  
17 Alyeska pipeline project activity. There seems to  
18 be little reason not to assume that similar results will  
19 prevail in Yukon Territory. Even though available  
20 information seems to indicate no major increase in  
21 violent crime in Fairbanks, as a result of project  
22 activity, an increase in violent crime is considered  
23 more likely in Yukon Territory, given the prevailing  
24 high rate of violent crime there.

25 Several means whereby a major  
26 increase in crime might be averted or allayed are  
recommended. These include implementing programs  
to deter migrant workers from coming to Whitehorse  
in hopes of project work, providing for adequate  
separation of construction camps and facilities from  
corridor communities, requiring the applicant to provide  
adequate recreational facilities at construction camps,  
providing special placement, housing and transport  
services to corridor village residents interested in  
work on the project, requiring non-resident workers to  
get job recalls after rest and recreation breaks at  
out-of-territory union halls, and maintaining an  
acceptable police population ratio."





1 MR. TEMPLETON: Dr. England, would  
2 you like to comment on what the studies that were done?

3 DR. ENGLAND: Yes, I might, to make  
4 it a little easier, Mr. Chairman and Commissioners, point out  
5 that I'm attempting to summarize here from the initial report,  
6 pages 529 to 541.

7 With respect to the Yukon setting,  
8 the higher crime rate prevailing in the Yukon Territory has  
9 been alluded to in the summary. Overall, crime rate in the  
10 Yukon Territory is about four times the national average and  
11 crimes of violence are about five times the national average.

12 Yukon Territory also has the highest  
13 traffic offence rate in Canada and the vast majority of the  
14 traffic offences are alcohol-related. The higher traffic,  
15 criminal code traffic offence rate, we recognize, could reflect  
16 more zealous enforcement, but on the other hand, we found that  
17 it also translated into a measure of impaired public safety,  
18 because the accident related injury rate in Yukon Territory is  
19 almost two times the national average.

20 About half of the violent and sudden  
21 deaths investigated by the RCMP in Yukon Territory are directly  
22 or in-directly attributed to alcohol and all non-capital murder  
23 and manslaughter offences directly or in-directly attributed to  
24 alcohol.

25 Alcohol consumption is the highest  
26 in Canada, being 17 times the national average.





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1 We noted with interest, a sharp in-  
2 crease in crime rates in Yukon Territory occuring in 1969.  
3 Coincident with this, was a sharp increase in exploration and  
4 development activity in the oil and gas and mining sectors of  
5 the economy. It may be entirely a coincidence because there  
6 is no cause and effect relationship demonstrated.

7 It's perhaps also instructive to note  
8 that, whereas in 1972 the average police population ratio in  
9 Canada, police per 1,000 population was 2, ranging from a low  
10 of 1.3 in Prince Edward Island and Nova Soctia to a high of  
11 3.3 in the Northwest Territories, with the Yukon Territory  
12 having the second highest ratio of 2.9 police officers per  
13 1,000 population. Information we received, a personal communi-  
14 cation to Statistics Canada, indicated that this ratio <sup>had risen</sup> to four  
15 per 1,000 in 1975, bringing it to the highest in Canada.

16 With respect to the Alaskan experience,  
17 we would point out that the Impact Information Center of Fair-  
18 banks, <sup>Star Burrough, 12pt</sup> North Star Burrough maintained an active interest in  
19 pipeline impact on crime in Fairbanks and reported for the  
20 period in 1974, January to August, a 21 per cent increase in  
21 crime rates over the preceding year. This, I should point out,  
22 is covering the period January to August. The project was  
23 really not underway until June, so this period has covered more  
24 than the period of initial construction; and by September that it  
25 increased another five per cent. But there is some confusion  
26 as it is difficult to interpret all of the information provided



The North Star Burrough Planning and Zoning Branch, for example, estimated the 1976 burrough population at 73,000, whereas the University of Alaska after very comprehensive survey, estimated it at 53,000, so there is a 20,000 discrepancy so it makes it difficult to establish what the rates are. Also the Impact Information Center data are from activity reports that the Fairbanks Police Department do not cover crime in the burrough as a whole.

The Fairbanks Police Department Activity Reports for the period 1973 to '75, do show a 23.9 per cent and a 32.5 per cent in the incidents of impaired driving offences, which translates into 7.4 per cent and 15.4 per cent increase in the rate of these offences.

A survey by Dr. Kruse of the University of Alaska, an attitudinal survey, revealed that many respondents perceived social conditions with respect to vandalism, theft and disorderly conduct in their neighbourhoods as having reached the level that they deemed poor to the worst condition they would expect to see.



1 Increase in crime, hostility and  
2 distrust ranks fifth on a respondent list of the ten most im-  
3 portant community changes that occurred in Fairbanks, as a result  
4 of pipeline construction. An amazing 46 per cent of the respon-  
5 dents surveyed indicated that they had personally experienced  
6 some crime incident, the majority of these being personal pro-  
7 perty crimes.

8 Fairbanks encountered another pro-  
9 blem. That related to the loss of experienced police person-  
10 nel to higher paying pipeline jobs. As of January, 1976, we  
11 were informed in a personal communication with the Chief of  
12 Police at Fairbanks, that they were approximately 30 men short  
13 at that time of the number they felt they required to maintain  
14 an acceptable police population<sup>ratio</sup> of 2.5 police per 1,000.

15 I would like to point out that prior  
16 to the initiation of heavy construction on Alyeska Pipeline,  
17 many people were anticipating problems involving large numbers  
18 of pipeliners on rest and recreation break in the City of  
19 Fairbanks.

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1                   Every indication we could find, just  
2 never materialized. For the most part, pipeliners on rest  
3 and recreation breaks left Alaska and they were facilitated  
4 in this, by an airline service run by Alaska-Braniff airlines  
5 called the Pipeline Express which took men to Houston.

6                   THE CHAIRMAN:       Thank you, Dr.  
7 England, if that completes that section of the report, I  
8 wonder if this would be an appropriate time to take a ten  
9 minute break.

10                  MR. GOUDGE:        I wonder if Dr.  
11 England knows what the crime rate in Houston was.

12                  DR. ENGLAND:       No, I'm afraid  
13 I don't.

14                  MR. TEMPLETON:     I wonder if he  
15 knows the relationship of that to the presence of lawyers.

16                  MR. GOUDGE:        Let's take a  
17 break. .

18                  (PROCEEDINGS ADJOURNED).

19                  (PROCEEDINGS RESUMED PURSUANT TO ADJOURNMENT).

20                  MR. CHAIRMAN:       I'd like to re-  
21 commence the hearing now, ladies and gentlemen. Mr.  
22 Templeton, whenever you're ready.

23                  MR. TEMPLETON:     We'd now like to,  
24 referring back to Page 7 of the handout, the next item on  
25 the list was public health and Dr. Nelson will discuss that.

26                  DR. NELSON:        What does the term





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1 'public health' encompass in our analysis, and using this  
2 term, we are referring to disease, injury, diet and mental  
3 stress. What conditions may be aggravated by project  
4 acitivity? What may be the consequences?

5 The focus is on incidence and  
6 frequency of disease, including mental illness. Increase in  
7 demand for health services and facilities, special health  
8 services and facility requirements, stress and attendant  
9 mental<sup>health</sup> problems. Consequences relate to impaired quality  
10 of service available to local residents, increase costs to  
11 be borne, increase in stress-related problems. Mitigative  
12 measures are referred to in my summary and will also be  
13 referred to by Dr. England.

14 Summary. The experience of Fair-  
15 banksans with respect to construction of the Alyeska Pipeline  
16 clearly indicates that a dramatic increase in demand for all  
17 types of medical services and facilities, should be antici-  
18 pated as a result of project actitivity.

19 Means are recommended whereby  
20 Yukoners and other Canadians are not burdened with any in-  
21 crease in health service costs, attributable to project  
22 activity and the quality of health care services available  
23 to residents is not impaired. Recommendations include  
24 requiring the applicant to first, make adequate provision  
25 for handling pre-employment medicals inhouse; second, cover  
26 salary costs and provide for housing, additional medical and



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1 support staff acquired as a result of project activity;  
2 third, to evacuate nonresidents from local hospital facilities,  
3 should use of these facilities approach capacity; and fourth,  
4 to apprise local medical authorities of the nature, magnitude  
5 and probably timing of medical service requirements.

6 It is also recommended that a  
7 special inter-agency Task Force comprised of all agencies  
8 responsible for planning, financing and delivering local  
9 health service, be struck, to do health care preplanning  
10 and develop contingency plans for health care delivery.

11 MR. FOX: Dr. England?

12 DR. ENGLAND: Reviewing briefly,  
13 the Yukon setting from relatively little information,  
14 basically the Yukon is serviced by one accredited hospital,  
15 the Whitehorse General. The occupancy rates of that hospital  
16 range from 46.6 per cent to 56 per cent during the last  
17 three years and other data we have examined, indicates a  
18 medical doctor population of twenty-two in Whitehorse, three  
19 of these being surgeon specialists and a small mental health  
20 unit.

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1                   The Alaskan experience, as indicated  
2 in the summary, revealed that the demand for medical services  
3 and facilities increased greatly in Fairbanks as a result of  
4 the Alyeska pipeline project activity. At the outset of  
5 the project Bechtel assumed responsibility for organization  
6 and delivery of project health needs, and they indicated at  
7 the outset that they viewed the local medical clinic  
8 understaffed and incapable of dealing with the demand that  
9 was anticipated, but no, suggested in-house handling of most  
10 of the medical functions required by the project. However, no  
11 action was taken on that, and as early as September, 1974,  
12 recognizing that project activity really got going in earnest  
13 in June, 40 to 120 pre-hire physical examinations were being  
14 handled each day by private physicians in Fairbanks, and  
15 three evacuations per day were being made from pipeline  
16 construction camps, and being referred to private practitioners  
17 in Fairbanks.

18                   As the project injuries increased, the  
19 demand for specialized medical services is increased and  
20 the number of specialists in the Fairbanks increased. There  
21 was some concern expressed in Fairbanks that at the same time  
22 the number of general practitioners decreased and that the  
23 residents needs with respect to general practitioners services  
24 were not being met, and in some cases, physicians assistants  
25 or medics were being used, and their services were allegedly  
26 being charged at physicians rates.





1                   The Alyeska Pipeline Services Company,  
2 the consortium of companies formed to build the Trans-Alaska  
3 Pipeline, took over from Bechtel after one year, responsibility  
4 for project medical program, and immediately requested bids  
5 from private medical clinics in Fairbanks to carry out pre-  
6 employment physicals, and the impact information centre  
7 reported that between May 1 of 1975 and April 1 of 1976, of  
8 the 30,073 pre-employment medicals carried out for the project,  
9 19,096, or 64 per cent, were done by medical people in  
10 Fairbanks.

11                   They also pointed out that between  
12 May 1, 1975 and 30 April, 1976, a one year period, a total  
13 of 1,283 pipeline workers, or pipeline related employees  
14 were evacuated to Fairbanks Memorial Hospital, an average  
15 of three evacuations per day.

16                   Fairbanks was serviced by three hospitals.  
17 One a private civilian hospital, one a public civilian  
18 hospital, and one a military hospital facility. By mid-  
19 February, 1975, seven or eight months after project  
20 initiation, the occupancy rate at careage North, the private  
21 medical hospital was 90 per cent, whereas two months earlier  
22 there had been as many as sixty empty beds. I might point out  
23 that generally 80 per cent seems to be regarded as a full  
24 occupancy rate.

25                   Careage North had this 90 per cent  
26 rate it is suggested, because the public hospital in Fairbanks





1 was packed to capacity.

2 With respect to mental health, the  
3 impact information centre compiled data on a number of  
4 indicators of stress commonly used in gauging change  
5 in community mental health. Some of the most striking  
6 indicators of increased stress amongst Fairbanksans were  
7 increases in the number of days of psychiatric patients that  
8 were served, the number of suicide and related calls that  
9 increased, divorce complaints, and juvenile arrests. All of  
10 these increased rather dramatically.

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1                   And I would also point out that the  
2                   activity resulting from construction of the Alyeska Pipeline  
3                   also increased the need for public health inspectors in the  
4                   Fairbanks area. Attempts to fill these positions were thwarted  
5                   by other conditions created by pipeline impact. In a report to  
6                   the Governor, it points out that housing in state pay scales have  
7                   restricted filling of four sanitary and public health, vacan-  
8                   cies in the Northern Regional office. That would summarize  
9                   some of the basic findings.

10                   MR. TEMPLETON: Mr. Chairman, we're  
11                   still talking about life patterns, now. We've talked about  
12                   acculturation, public safety and public health, now we'd like  
13                   to talk about cost of living and income, which will be dealt  
14                   with by Mr. Fox.

15                   MR. FOX: The cost of living and  
16                   incomes are considered together so that increases in nominal  
17                   incomes are placed in proper perspective. By that I mean that  
18                   income, the dollars people take home, may increase, but infla-  
19                   tion may reduce the actual increase in real income that results.  
20                   So, we've covered both the increase in cost of living and  
21                   incomes here, together in just one section.

22                   The project will influence cost of  
23                   living through increased demands for goods and services,  
24                   increased costs of services essential to movement of goods, and  
25                   increased labour costs. The project will effect income by way  
26                   of direct employment and high income overtime.



1 Incomes of pipeliners will cause  
2 workers in other sectors to seek higher wages. Employers in  
3 other sectors may increase wages to compete for labour. Cost  
4 of essential goods and services will rise faster than some  
5 income and, as a consequence, the real income of many people  
6 will decline.

7 The summary statement is as follows:  
8 Nominal incomes in the Yukon are generally higher than the  
9 Canadian average. However, because the cost of living index is  
10 not published for the Yukon, we cannot determine the real value  
11 of incomes. Neither will we be able to assess the change in  
12 the Yukon inflation rate attributable to pipeline activity,  
13 should construction begin. We recommend that Statistics  
14 Canada include the Yukon in its surveys and that an agency be  
15 established to utilize this information to suggest alternatives  
16 to offset deleterious income effects attributable to pipeline  
17 construction.

18 We believe that the Alyeska pipeline  
19 was a significant factor in the Alaskan rate of inflation and  
20 caused real incomes of many Alaskan residents to decline during  
21 1974 and 1975.

22 It is noteworthy, by the way, that  
23 in the Alyeska case, peak employment on the pipeline was 20  
24 per cent of the 1971 Alaska labour force. According to the  
25 estimates of the applicants, in the case of the Alaska Highway  
26 pipeline, peak employment will be about 22 per cent of the 1971



1 Yukon labour force. In other words, the proportions are  
2 roughly the same so one might expect, in the absence of con-  
3 trols or other majors, that about the same effects would  
4 occur.

5 ' Therefore, to the extent the events  
6 that occurred in Alaska will be repeated in the Yukon, we sug-  
7 gest to the developer should bear his share of the social costs  
8 which will otherwise be incurred by Yukon residents. To the  
9 degree that price increases can be controlled during a boom  
10 period, the adjustments during the post-construction phase  
11 will be made much easier.

12 In general, we suggest two broad  
13 categories of mitigative majors here. One thing that we con-  
14 sider important is for the hiring of non-Yukon residents to be  
15 located in southern Canadian cities and that people will be  
16 discouraged from coming to the Yukon to look for employment.  
17 This did not, apparently, occur in the case of Alyeska.

18 The other major that seems an impor-  
19 tant one to implement, is to use local businesses as little as  
20 possible to supply the demand for services and goods associated  
21 with pipeline construction. That will take a little bit more  
22 doing, but we think it's a matter that deserves careful consid-  
23 eration.

24 That about covers my point.

25 MR. TEMPLETON: Dr. England will  
26 comment on what was done in the study.







1 DR. ENGLAND: With respect to the  
2 Yukon setting, as already indicated by Dr. Fox, Statistics  
3 Canada does not include the Territory in consumer price surveys.  
4 The limited data that is available suggests that the food prices  
5 here range from 20 to 40 per cent than in Vancouver or Edmonton.

6 There are a number of factors that  
7 come to play in explaining the higher costs. These include the  
8 transportation cost, which, since retailers in northern communi-  
9 ties tend to apply a fixed percentage mark-up over the whole-  
10 sale price, inclusive of transportation costs.

11 I would also point out that the Food  
12 Prices Review Board reported that retailers in northern communi-  
13 ties tend to be supplied by few wholesalers, a few wholesale  
14 outlets in the south and hence for chain and chain affiliated  
15 stores, a strong element of control exists in the channel be-  
16 tween wholesaler and retailer, tending to limit competition  
17 between retail stores. The Board suggested that, and I quote,  
18 "realistic price competition would be difficult to achieve  
19 because of the narrow base supplying northern retailers."

20 While it is probable that a lack of  
21 competition among retail stores in the North leads to some de-  
22 gree of monopoly pricing, some portion of what is perceived as  
23 excess profit, we do feel, generally reflects higher operating  
24 costs of northern stores.



1 I think the point has already been made  
2 in the Summary, that although there is a higher cost of  
3 living in the Yukon Territory, to some extent incomes have  
4 adjusted to offset the effects of higher prices. We would  
5 bring to your attention the fact that during 1970, whereas  
6 the incomes of males who worked in Canada, the average income  
7 was about \$6,538.00, in the Yukon it was \$7,919.00, and also  
8 1970, 34 per cent of Yukon male workers earned over \$10,000.00  
9 compared to about 17 per cent of the total Canadian male  
10 workers. So there was a certain degree of offset in that  
11 regard.

12 A lacking recent information with  
13 respect to Yukon incomes and rates of inflation, it was  
14 impossible to speculate on recent changes in real versus  
15 nominal incomes within the Yukon.

16 With respect to the Alaskan experience,  
17 we would point out that increased activity resulting from  
18 construction of the Alyeska Pipeline was an important element  
19 in upward pressure of prices on consumer goods.

20 Another manifestation of the Alyeska  
21 project, was the increase in demand generated by the Alyeska  
22 project was a shortage of some commodities.

23 During the period of April 1974 to  
24 April of 1975, when pipeline activity was well under way, the  
25 rate of inflation in Anchorage was significantly higher than  
26 the average rate for the rest of the United States, and I point



1 out Anchorage as opposed to Fairbanks, because Anchorage is  
2 the basis of surveys in the United States within Alaska.  
3 Fairbanks is not included in surveys there.

4 Independent research, however, conducted  
5 by the, -- again the impact information centre illustrated  
6 Fairbanks price movements for food and non-food items. It  
7 is notable that during the ten month period from September,  
8 1974 to June, 1975, food prices in Fairbanks rose by about  
9 15.9 per cent.

10 We conclude that while the total  
11 effects of <sup>this</sup> local inflation in Fairbanks, had yet to be felt  
12 or documented in Fairbanks, Alaska, some evidence of it's  
13 effect on certain sectors is available.

14 A report by the Alaska Department of  
15 Community and Regional Affairs pointed to one effect of this  
16 inflationary pressure with respect to plans to build a  
17 State parking garage project in Fairbanks, at one point the  
18 budget and audit committee found that a one year delay in  
19 start of construction from earlier 1974, pre-Alyeska date,  
20 to the 1975 season resulted in an increase of 15 per cent  
21 for material costs and nearly 100 per cent for labour costs.

22 Now, I've indicated in the Summary  
23 another important consideration is the effect of  
24 inflation on local incomes. Many sectors in the Alaskan  
25 economy enjoyed an average increase in nominal wages, in  
26 excess of 15 per cent over the two year period in 1974/75.





1 Contract construction, business services, both of which were  
2 composed primarily of direct pipeline related services, were  
3 among the leaders in nominal incomes.

4                   Per centage changes in real wages,  
5 however, revealed that many wage and salary earners actually  
6 fell behind in 1974. In 1974 some 62.4 per cent of the wage  
7 and salary earners received a real income change of less  
8 than 5 per cent which one would <sup>have</sup> normally anticipate without  
9 a project. Forty-six per cent incurred a loss of real income.  
10 About 15 per cent of the wage and salary earners received  
11 real income increases in excess of 15 per cent in 1974, the  
12 proportion of people in this category increased to about  
13 30.2 per cent during 1975. But many of them still did not  
14 recapture or make up for their losses in the previous year.  
15 Overall the 1974/75 period, around 40 per cent of the wage  
16 earners fell behind or made no gains in real income.

17                   I think that's all I can summarize,  
18 Mr. Chairman.

19                   MR. TEMPLETON: So, still on the life  
20 patterns group of issues, we now turn to employment. That  
21 will be done by Mr. Fox.

22                   MR. FOX: With regard to employment, our  
23 perspective is upon the effect of the project, upon the  
24 number of unemployed people in the Yukon. Given that there  
25 are a number of unemployed in the Yukon, the lowering of the  
26 unemployment rate is a relevant social consideration.





1 Now, in the case of the Alaska  
2 Alyeska Pipeline, the influx of people to Alaska in search  
3 of pipeline related jobs led to a higher unemployment rate  
4 and a higher labour turnover rate. This was attributable  
5 in large part to locating hiring halls in Alaska. The high  
6 turnover rate left vacancies unfilled in local businesses  
7 and increased cost to local entrepreneurs.

8 We expect that some Yukon residents  
9 will gain short term employment during the proposed  
10 construction period. In addition, we believe, the problems  
11 associated with migration and labour turnover will be  
12 manifest in the Yukon in the absence of controls.

13 The impact likely is a small to moderate  
14 decline in unemployment rate, even though the project have  
15 theoretical capacity to eliminate unemployment.

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1 Benefits will tend to be of short  
2 term nature, except for the modest amount of additional  
3 employment that will be provided by maintenance operations  
4 after the project is built.

5 We recommend here, as I mentioned  
6 in the previous case, the hiring halls for non-residents be  
7 located outside of the Yukon and that a co-ordinated effort  
8 by the Department of Manpower, the applicant and local  
9 businesses be undertaken if employment benefits to Yukoners  
10 are to be maximized.

11 MR. TEMPLETON: Dr. England,  
12 would you like to say what studies were done on this?

13 DR. ENGLAND: Yes, with respect  
14 to this paramater, we encountered somewhat the same diffi-  
15 culties as we had with the preceding and that general  
16 information on the Yukon labour force is not collected on a  
17 regular basis. Yukon estimates tend to be incorporated with  
18 those for British Columbia and we've had to rely on 1971  
19 Census Information which is somewhat dated.

20 According to 1971 information, the  
21 Labour Force of Yukon was about 8,150, personal communication  
22 with officials of Canada Manpower, indicate that that figure  
23 may now be somewhere in the neighbourhood of 11,000, reflecting  
24 an average annual growth rate of about 7 per cent over the  
25 five year period. On this rapid rate of increase, we felt  
26 was surprising since the population only increased about



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1 3.3 per cent per annum during the same period.

2 We present in the initial evaluation  
3 a breakdown by sector of the Labour Force, areas of employ-  
4 ment of which government sectors are the largest, accounting  
5 for 26 per cent of the labour force. With respect to the  
6 Alaskan experience with Alyeska project, the demand for pipe-  
7 line workers in Alaska increased from about three thousand  
8 in the second quarter of 1974 to about twenty-three thousand  
9 by the third quarter of 1975 and in spite of the number of  
10 jobs made available by pipeline construction, the absolute  
11 number of unemployed, increased over the six year period  
12 1970 to '75 from 9,700 to 14,800.

13 At present, the composition of the  
14 ranks of the unemployed in Alaska is not clear. We do not  
15 know what proportion of the unemployed is made up of those  
16 Alaskans who were formerly unemployed and what proportion  
17 includes migrants to Alaska, whose jobs expectations were not  
18 met.

19 We were informed that forty to sixty  
20 per cent of the cheques made out to pipeline workers in  
21 Alaska were deposited in out-of-state banks. We assume that  
22 if this implies that about one-half of the pipeline labour  
23 force was composed of Alaskan residents and the number of  
24 jobs filled by Alaskans could have increased from approximately  
25 1,600 in the second quarter of 1974 to about 11,700 in the  
26 third quarter of 1975 to the extent that this in fact is what





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1 occurred, we still do not know what proportion of these jobs  
2 were filled by formerly unemployed Alaska residents.

3 One problem encountered in Alaska  
4 was the sudden increase in labour turnover and it's a con-  
5 sideration we think, should not be ignored. Turnover rates  
6 have been estimated to be higher than 500 per cent for  
7 several businesses in Fairbanks during the height of pipeline  
8 construction. Staff turnover in a restaurant normally  
9 employing twenty people was two hundred and the Fairbanks'  
10 Municipal Utility System experienced a 100 per cent turnover  
11 rate during a ten month period in 1975.

12 Reasons for high turnover rates  
13 obviously seem to be the income differential between pipeline  
14 and non-pipeline related jobs. Most local businesses in  
15 Alaska were not able or willing to compete with pipeline  
16 wages, hence anyone with the ultimate goal of high income,  
17 could not be induced to remain in lower income jobs. The  
18 consequence of the rapid turnover, a higher recruitment and  
19 training costs and a reduction of output while replacement  
20 labour is found and trained.

21 That's all I have to say, Mr.  
22 Chairman.

23 MR. TEMPLETON: Those are all  
24 of the components that we were able to study in the -- in  
25 the Life Patterns category. There were some that we did not  
26 study and we would like -- Dr. Nelson would like to comment





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1 on those.

2 DR. NELSON: Two items that were  
3 in our original list of important items in the Life Patterns  
4 component were subsistence in recreation. We have not had  
5 the time nor the basis to study these. They are, however,  
6 quite significant, particularly the matter of subsistence.

7 There are really two components to  
8 the concern with regard to subsistence or at least two.

9 The first is the role that country  
10 food or the yield from subsistence hunting and fishing plays  
11 in the diet of local residents, particularly native people.  
12 There are studies which have been completed in Northern  
13 Canada in regard to native communities which show that  
14 higher quality diet, particularly with regard to protein,  
15 is attainable from country food as opposed to many varieties  
16 of imported foods.

17 There is also the matter of the  
18 replacement value of the country food. If the opportunity  
19 to acquire such food declines, then it has to be replaced  
20 by imported items at higher cost.

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1                   The second concern with regard to  
2 subsistence is the activity of hunting and trapping and  
3 related matters in itself. It's clear that this plays an  
4 intrical part in the cultural pattern and lifestyle of the  
5 native people in particular. The activity is rooted in their  
6 value system, and in their way of life.

7                   It's necessary to look rather deeply  
8 at this in dealing with any impacts of the proposed pipeline.  
9 Moreover, in this particular context, that is in the context  
10 of subsistence, the native people themselves have to play a  
11 very basic role in any studies that are carried out, with  
12 regard to subsistence.

13                   Any outside group will have real  
14 difficulty in giving anything approaching a comprehensive  
15 assessment of this item.

16                   The second item that we have not had  
17 time adequately to address is the matter of recreation.  
18 Generally recreation patterns in areas and landscape values  
19 for recreational purposes are fairly well known in the  
20 Hinterlands of urbanized areas in southern Canada. Less is  
21 known about recreational resources valued by residents of the  
22 sparsely populated areas of northern Canada, however.

23                   These resources valued by local  
24 corridor residents for recreational purposes need to be  
25 identified. Once again, the role of local people in  
26 identifying these recreational resources, and associated



1 aesthetic values which Mr. Fox will address later on, is a  
2 very, very important one.

3 The information and the perception of  
4 these recreational places lies by and large in the local  
5 people and they have to play a fundamental role in providing  
6 us with the information.

7 MR. TEMPLETON: That concludes the  
8 part on life patterns, and you'll note on page 7 of the  
9 hand-out that we had, where we broke the human environment  
10 into life patterns, local economy, man-land heritage and  
11 infrastructure, that we assigned the heaviest weight, the  
12 most importance to life patterns, you can tell that by the  
13 width of the piece of the pie.

14 Now, we can go on to local economy,  
15 and the first item in that is trapping which will be  
16 commented upon by Mr. Mair.

17 MR. MAIR: I should like to address and  
18 deal with the summary and then raise a few particular  
19 issues which perhaps don't conclude fully in the summary.

20  
21 Do I need to repeat that, I'm going to  
22 reverse the procedure a bit and deal with the summary first  
23 and then go back to the concerns of potential consequences  
24 because there are a few points I'd like to make that perhaps  
25 don't come through adequately in the summary.

26 The number of trappers in the Yukon





1 Territory has increased in recent years. This is probably  
2 attributable in part to the strong market for long fur, and I  
3 believe it was bringing by and large, fairly good prices for  
4 fur generally for the last few years. A relatively small  
5 proportion of the Yukon wild fur harvest is taken from trap  
6 lines within the project corridor however.

7 Beaver, muskrat and martin appear to  
8 be the staple fur-bearers of the Yukon trapping industry.  
9 Potential for short term impacts on aquatic fur bearers is  
10 anticipated if fall and winter project activity results in  
11 diminished water level; I should add or in flooding out the creeks, if  
12 water levels <sup>/are raised</sup> in occupied beaver and muskrat habitat. It's  
13 recommended that active trappers be compensated by the  
14 applicant for fur-bearer die out attributable to project  
15 activity. It is further recommended that trappers be  
16 apprived of their rights to compensation for damages and  
17 the procedures they must follow in making application for  
18 compensation.

19 So that trappers are not intimidated  
20 in this process, a certain degree of informality should  
21 prevail. Dr. Nelson mentioned already why we have concern here.  
22 The concern really is the disruption or impairment of an activity  
23 that is of some economic value to native people in particular,  
24 one to which some have a strong emotional attachment. There  
25 are some other things, however, that I think should be raised  
26 here.





1                   When you're looking in the major  
2 volume, you'll discover that the total income from trapping  
3 is not that high in relation to other resource incomes in  
4 the Territory, but while the value may not be very high in  
5 the activity and the income earned, an integral part of the  
6 livelihood of substantial number of people has been stated as  
7 historically and emotionally important.

8                   Also, I think that the present value  
9 at this stage of development should not be viewed as the  
10 maximum because quite apart from price fluctuations, it  
11 would seem that a more planned management production could  
12 improve the economic benefits.

13                   In other words, there are potentials  
14 in the trapping industry for more income, and therefore,  
15 this should not be overlooked in trying to rate the impact.

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1 But we have a concern also of the  
2 possibility of over-harvesting in specific areas. This may be  
3 by trappers working on the construction who, in their spare  
4 time, would wish to trap for recreation reasons and so on, could  
5 lead to a certain over-trapping unless this was thought through.

6 There is the problem also, that with  
7 the number of workers from outside, they're likely to be  
8 here with very high incomes, there'll be a ready market, or  
9 could be a ready market for furs, maybe of some particular spe-  
10 cies, but it could be of all furs and therefore, there could be  
11 a push or a pressure placed on the trappers to over-trap to meet  
12 this sudden market. Then, when the pipeline is completed, the  
13 construction is completed and the high income people leave, the  
14 residents are left with a depleted resource.

15 There is some direct impact associat-  
16 ed with pipeline construction, but it's anticipated to be large-  
17 ly on the aquatic furbearers and also anticipated that it should  
18 be relatively short-term.

19 I think that's all.

20 MR. TEMPLETON: Dr. England, would  
21 you comment on the studies that were done?

22 DR. ENGLAND: Yes, and it will be  
23 very brief indeed, as there's, we found very little informa-  
24 tion available of the stand of nature on trapping. It has  
25 already been noted that there has been an increase in the num-  
26 ber of trappers, somewhere in the order of 32 per cent increase



1 between 1962-63 and 1974-75, and native persons, status as well  
2 as non-status Indian accounting for all of the increase. The  
3 very dated information from 1962-63 indicated that about 40  
4 per cent of Yukon trappers resided in the corridor. We have  
5 no reason to question but what similar situation prevails to-  
6 day. As already indicated, it would appear however that a  
7 relatively low percentage, somewhere in the order of 10 per  
8 cent of the Yukon wild fur production came from traplines  
9 traversed by or in very close proximity to the corridor.

10 We would simply point out also that  
11 the dramatic increase in prices of long fur in particular in  
12 recent years has helped account for some of the increase in  
13 activity, particularly since 1970-71, when trapping reached  
14 a very low level in production. But I do not think there's  
15 any particular basis for great optimism that increased income  
16 earned by trappers in recent years will necessarily be sustained,  
17 particularly since much of the increase realized lately has  
18 been due to coincident in cyclic abundance of lynx in a very  
19 strong market for long fur. In 1973-74, for example, almost  
20 two-thirds of the total income derived by Yukon trappers was  
21 from the sale of lynx.

22 I would point out that, also, to  
23 clarify, in pointing out aquatic furbearers being the staple  
24 species, that is our view over the long haul. In recent years,  
25 it has been lynx and certain long fur species that, in the  
26 economy of the fur trapping industry, have accounted for the





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1 lion share, but, over the long haul, it seems to be the aquatic  
2 furbearers that are the staple of the industry.

3 That's all, Mr. Chairman.

4 MR. TEMPLETON: The next item under  
5 Local Economy is commerical fisheries, which is being dealt  
6 with by Mr. Mair.

7 MR. MAIR: Again, I should like to  
8 proceed with the trapping and deal with the summary first.  
9 The commercial fisheries in Yukon Territory are presently  
10 rather insignificant in terms of production, landed value and  
11 market value. Pipeline construction activity is expected to  
12 cause a relatively small, temporary degradation of habitat,  
13 which will be reflected in fish populations and consequently  
14 commercial harvest.

15 If recommendations for mitigating  
16 the effects of construction activity upon fish habitats, present-  
17 ed in the Fish and Water sections of the large report are  
18 followed, project impact upon commercial fisheries should be  
19 minimal.

20 I turn back now to concerns. For  
21 one thing, the appraisal does not encompass the domestic fish-  
22 ing, and while, in the Yukon at the present time, the use  
23 doesn't seem to be as great as in some other areas and as well  
24 as it's not a permanent source of earned income, the fact remains  
25 that the resource is always something that's available  
26 to native people in particular know it's there. It is





1                   important to them. In times of stress, they can  
2 turn to fishing, either in a commercial sense or for subsistence  
3 and it gives them some opportunity of maintaining a certain  
4 independence.

5   Again, I should like to comment that  
6 the value, the present value of the commercial fishery does  
7 not take into account the potential for increasing the fishery  
8 and, therefore, we should not be misled into discounting the  
9 value, the potential value. As well, recreation was mentioned  
10 by Dr. Nelson, but we have little or nothing in the report so  
11 far on the recreational fishing, tourist industry fishing and  
12 so on. This would need some pre-planning, but it should not  
13 be written up as an unimportant aspect of the fishery           when  
14 examining the potential impact.

15   The real value, based on potential  
16 is difficult to evaluate at this time, Suffice it to say that  
17 it should be taken into account in assessing impact. However,  
18 going back to the original findings, we do believe that with  
19 proper controls, the impact foreseen should be relatively small  
20 and a relatively short term duration.

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1 MR. TEMPLETON: Dr. England, would  
2 you like to comment on what studies were done?

3 DR. ENGLAND: Mr. Chairman, Commiss-  
4 ioners, we found the data so limited with respect to this  
5 particular parameter, that I think basically everything has  
6 been covered in this Summary, and there is little I can elu-  
7 cidate on at this point.

8 MR. TEMPLETON: Then, the next  
9 item under Local Economy, and that again is shown on page  
10 7 of the handout, the asteriks indicating those items, issues  
11 that we have not addressed, these will be commented upon by  
12 Dr. Nelson.

13 DR. NELSON: There are 4 issues  
14 in Local Economy, which, at least 4, which we have not as yet  
15 addressed. The first is Service and Retail, the second is  
16 Planned Land Use Allocation, and the third is Mining, and  
17 the fourth is Tourism.

18 What are the concerns with respect  
19 to Service and Retail? We are concerned that increases and  
20 demands could induce small business to expand at a time when  
21 capital cost of construction, etcetera, are inflated and  
22 serious financial problems in servicing this debt after the  
23 boom is over would be encountered. We are concerned that  
24 turnover will increase greatly during construction. We are  
25 concerned that difficulties in getting additional goods could  
26 be encountered if there is a lag in expanding transport



1 facilities. With regard to Planned Land Use Allocation, in  
2 the absence of long-term use plans, reallocation of resources  
3 project activity could impair or preclude some valuable  
4 development potential. For example, will the local requi-  
5 rements for gravel be protected for use on a long-term basis,  
6 will high value commercial/recreation sites be destroyed?  
7 Will pipeline construction infrastructure be located so as  
8 to be of enduring benefit? With regard to Mining. We are  
9 concerned that temporary dislocation may occur in the industry  
10 that there may be increased labour turnover, we are concerned  
11 about poten-  
12 tial for labour unrest given to higher income of a pipeline work-  
13 force.

13 With regard to Tourism, we are  
14 concerned about disruption of traffic flows due to construction  
15 activity, overburdening of surface facilities, particularly  
16 accommodation and food. Service Industries in the corridor  
17 could lose tourist business, but this would probably be more  
18 than offset by sale of goods and services to pipeline-related  
19 personnel. We are concerned that the problem would be most  
20 acute for non-corridor communities with a high dependence on  
21 tourism, for example, Dawson City. We are concerned that  
22 there needs to be some serious thought given to means where-  
23 by disruption of normal tourist trade in non-corridor  
24 communities can be minimized.

25 MR. TEMPLETON: That concludes  
26 the Local Economy section. And now we can go on to what we





1 call the Man Land Heritage. And the first issue that we've  
2 addressed under this is Archaeological and Historical Sites.  
3 Dr. Nelson.

4 DR. NELSON: With regard to archaeo-  
5 logy, we are concerned with the preservation and use of the  
6 Canadian Heritage, where that heritage includes an array of  
7 cultural and historic features. Features of interest to all  
8 residents within the area, as well as those in other parts  
9 of Canada. What is the potential for impact? And are there  
10 mitigated measures that can be applied? It's possible that  
11 destruction of the archaeological sites could occur and they  
12 are <sup>a</sup>non-renewable resource, so that there will be an irrepla-  
13 ceable loss, given that type of occurrence, the potential for  
14 impact is <sup>however</sup> quite low, given that the archaeological sites are  
15 scattered and scarce to actual areas of disturbance, the  
16 disturbance occurring in a narrow band.

17 SUMMARY - The proposed Alaska Highway  
18 pipeline crosses territory which has been occupied by man  
19 since the most recent Pleistocene deglaciation about 10,000  
20 years ago. Physical manifestations of this past human occu-  
21 pation are known as prehistoric or archaeological sites. These  
22 sites contain data relevant to past human events and cultural  
23 processes. To understand the past these data must be recovered  
24 in a rigorous, scientific manner from undisturbed sites.  
25 Pipeline construction activities will disturb sites located  
26 within the right-of-way to varying degrees.





1 It is important that mitigative measures be undertaken to  
2 protect known archaeological sites and to locate and protect  
3 unknown sites which may lie within the proposed route.

4 Both prehistoric sites, relating to  
5 occupation by aboriginals, and historic sites relating to  
6 exploration and occupation by Europeans are known in the region.  
7 These sites are concentrated in specific areas. In other  
8 areas no sites are known as yet but there exists a high po-  
9 tential for discovery. Both areas of known and potential  
10 sites should be protected by avoidance or mitigative proce-  
11 dures. Re-routing of the line may be unnecessary if mitigative  
12 procedures such as excavation prior to construction are  
13 carried out.

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I would briefly point out that the archeological interest in Southern Yukon began in the late 1940's with construction of the Alaskan military highway and there was a modest salvage program in the 1940's and since that time, a small amount of sporadic investigation, and to date, somewhat less than a hundred sites have been discovered, about seventy prehistoric sites and less than fifteen historic sites are known and of these, only a handful have been excavated.



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1                                   Reconnaissance and excavation has  
2       been concentrated mainly on the shoreline of Kluane Lake  
3       and Dezadeash Valley, particularly around Champagne. Some  
4       attention has also been paid to the shoreline <sup>environs</sup> environs of  
5       Teslin Lake. Most of the known archaeological sites are  
6       located on Kluane Lake around Champagne and on Teslin Lake  
7       and few sites are known for other areas along the proposed  
8       route.

9                                   The important think I think though,  
10      is that it is speculated that the Southern Yukon is possibly  
11      one of the routes of entry of early man into North America.  
12      No early-man sites have yet been found in Southwest Yukon  
13      but they have been discovered nearby in Central Yukon and  
14      in Alaska. Early-man sites therefore, may be found in  
15      Southern Yukon and this would greatly add to our understanding  
16      of the populating of the new world.

17                                  That's all I have to say, Mr.  
18      Chairman.

19                                  MR. TEMPLETON:     Next item under  
20      the man/land heritage category is the Kluane National Park,  
21      Mr. Mair.

22                                  MR. MAIR:         In the major volume  
23      which you have, under National Parks, it's stated that there  
24      are areas of special public interest set aside to preserve  
25      significant geographical, geological, biological historic  
26      features as a national heritage for the benefit, education





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1 and enjoyment of Canadians. Now the question is asked on  
2 the first page, what are the concerns -- the major concern  
3 really is then with National Parks -- has to be the destruc-  
4 tion or impairment of national attributes of any park.

5 In the case of Kluane, the Dall's  
6 sheep are of primary concern as the project crosses critical  
7 winter range. Go to the summary then, the proposed gas  
8 pipeline across Southern Yukon falls within the northern  
9 boundary of Kluane National Park, at the base of Sheep  
10 Mountain, Milepost 135 to 150. This crossing is unavoidable  
11 because Sheep Mountain rises directly from Kluane Lake at  
12 this point. Sheep Mountain, a unique feature of the park,  
13 provides critical winter range for up to 200 Dall sheep.  
14 Depending on snow conditions, the sheep descend to the  
15 proposed pipeline alignment to feed, thus, all winter con-  
16 struction activities should be prohibited in this area.

17 I should simply add, when we're  
18 saying all winter construction activities, that would  
19 refer to any activities even such as modest clearing or  
20 pre-construction work. In other words, there shouldn't  
21 be disturbance during that critical period.

22 MR. TEMPLETON: Dr. England?

23 DR. ENGLAND: I have nothing  
24 to add to clarification of that summary.

25 MR. TEMPLETON: The next item is  
26 ecological reserves in game sanctuaries by Mr. Fox.





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1 MR. FOX: Here we're concerned about the  
2 disruption of sites identified as representative eco-  
3 systems proposed for official designation. The potential  
4 impact on two sites is of particular concern to us.

5 One of them is the Duke Meadows  
6 area at Milepost 110 where approximately two and one-half kms  
7 and ten hectars would be disturbed of this grassland area and  
8 the other is the Sheep Mountain-Mount Wallace area which  
9 is -- touches on the park that Mr. Mair just mentioned,  
10 Milepost 136 to 154.

11 Here there are about -- quite a few  
12 -- quite a little -- about nine miles and 120 hectars would  
13 be disturbed.

14 Now, the summary is as follows:

15 The proposed gas pipeline alignment  
16 across southern Yukon, occasionally lies within the boundaries  
17 of Kluanë Game Sanctuary and the proposed boundaries of four  
18 ecological reserves. The Klutlan Glacier Area, Milepost 1 --  
19 I guess I've got the wrong number here -- Milepost 45 to 87,  
20 Duke Meadows, Milepost 110; the Sheep Mountain-Mount Wallace  
21 site, Milepost 136 to 154 and the Mount Archibald-Decoeli  
22 Area, Milepost 170 to 180.

23 Two other proposed ecological  
24 reserves fall within the project corridor. One of these is  
25 the Wolf Lake site, Milepost 360 to 450, will not be  
26 affected by the project. The Koidern River area could be



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1 affected, however, if chilling of the pipeline alters  
2 drainage patterns.

3 For the most part, the Klutlan  
4 Glacier and Mt. Archibald-Decoeli areas would be marginally  
5 affected since the pipeline alignment as proposed, avoids  
6 special areas, rare, unique or representative units,  
7 within them. The unique grassland within Duke Meadows, will  
8 be crossed by the pipeline. This crossing appears unavoidable  
9 because of terrain features at this point.



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1                   Of the four international biological  
2 program sites that are crossed, the Sheep Mountain, Mount  
3 Wallace site will likely experience the greatest effect. The  
4 proposed routing crosses the lower edge of critical Dall  
5 Sheep winter range at the base of Sheep Mountain, one of  
6 the unique features of this reserve.

7                   This area is included in Kluane Game  
8 Sanctuary. This crossing is also unavoidable because of  
9 physical constraints. In addition, this reserve includes  
10 the Slims River Delta which would be severely disrupted  
11 by summer construction. This is avoidable by following the  
12 former routing of the Alaska Highway.

13                  Construction across Duke Meadows in  
14 the base of Sheep Mountain will have to be strictly  
15 controlled. No facilities should be located within them.  
16 Construction at the base of Sheep Mountain and across Slims  
17 River, should be made in summer. A crossing of Slims River  
18 upstream from the proposed site, along the former alignment  
19 of the Alaska Highway should be considered.

20                  MR. TEMPLETON: You don't have any  
21 comments, Dr. England?

22                  Next, is the conclusion of this man-  
23 land heritage section, the items which we have not yet  
24 addressed. Mr. Fox?

25                  MR. FOX: Well the major item that is  
26 not addressed here, are the aesthetics impacts of the pipeline



1 development. There are two major categories of concern.  
2 One is that of ensuring that the aesthetics of the landscape  
3 is impaired as little as possible. Such things as borrow  
4 sites should be rehabilitated, camp sites should be designed  
5 carefully, access roads should be so located as to preclude  
6 aesthetic disruption.

7 The second major concern is that the  
8 fact that the Alaska Highway is an important tourist artery  
9 and offensive scarring of the landscape visible from the  
10 Highway should be minimized.

11 We would also point out that native  
12 people, among others, should certainly be consulted and their  
13 perceptions, taken into account in making any assessment of  
14 the aesthetic affect of the proposed development.

15 The final category is termed infrastructure.  
16 Although we show it here as being fairly small, it's possible  
17 that when all the studies are done, perhaps it might loom a  
18 little larger at the expense of some of the others. The issues  
19 that we have addressed are first transportation which will be  
20 discussed by Dr. Nelson.

21 DR. NELSON: As Dr. England will  
22 undoubtedly indicate in his follow-up remarks, we have low  
23 level of information with respect to transportation.

24 A fairly comprehensive statement on our  
25 concerns, however, is included on page 674 and 675 of the  
26 initial volume, under potential for change.







1                   The first concern is the potential  
2 for diversion of existing transportation services to pipeline  
3 needs leaving unfilled gaps in the local supply linkages.  
4 This may or may not be a problem, depending on the validity  
5 assumption that transportation companies will have a strong  
6 interest in maintaining business relations with their  
7 regular customers, rather than diverting their services to  
8 a short term construction project.

9                   Second, more important is the potential  
10 for increased transportation costs to Yukon business,  
11 reflecting perhaps an increased demand for transportation  
12 services in general, or increased competition for inputs  
13 within the industry.

14                  Third, in addition, we expect some  
15 additional cost to be incurred for road maintenance, as  
16 was the case in Alaska, and Dr. England will be commenting  
17 on that.

18                  Finally, with respect to operation and  
19 maintenance, we are concerned about the extent that excess  
20 capacity is built into the system, during the construction  
21 period, in the form of fixed capital, long term financing  
22 problems, could be encountered if capital costs are not  
23 recovered during the construction period.

24                  Summary. We believe that pipeline  
25 construction in the Yukon could divert transportation facilities  
26 away from their normal activities or cause transport costs



1 to increase, and thus cause a strain on the local economy.  
2 We suggest that the applicant be responsible for maintaining  
3 the normal level of transport services to the Yukon at  
4 pre-construction prices plus a normal inflationary factor.

5 Further, we believe that substantial  
6 costs will be incurred for road maintenance in the Yukon. We  
7 recommend that the applicant or trucking firms be responsible  
8 for these extra costs.

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1 MR. TEMPLETON: Dr. England, would  
2 you like to comment on the studies you have done?

3 DR. ENGLAND: Yes, as Dr. Nelson  
4 indicated, we had considerable difficulty in acquiring in-  
5 formation in this area, our enquiries met with a deadend,  
6 classified information with respect to the degree to which  
7 existing capacity is being utilized which is data maintained  
8 by the Transport Commission. But we would point out that the  
9 problem as we see it, given a lack of information, is one of  
10 the degree to which the utilization of existing trucking  
11 facilities will overtax the system, and the speed with which  
12 they might be able to respond to an increase in demand. There  
13 is a limited amount of information that has been generally  
14 available with respect to White Pass Railway, indicating that  
15 railway could handle traffic of a considerably greater magnitude  
16 than it is at the present time, but it is not all clear how  
17 quickly these adjustments to the existing capacity could be  
18 achieved. But with respect to the Alaskan experience, again,  
19 there has been little documentation. However, enquiries made  
20 of the Fairbanks Chamber of Commerce indicated to us that  
21 during the first six month period of construction of the Alyeska  
22 pipeline, there was significant shortage of transportation  
23 services available for local needs. And again, harkening back  
24 to the point I made earlier with respect to the rural impact  
25 information program, there was alleged, with respect to the  
26 interior communities problems with transportation, that





1 freighting aircraft tended to be diverted to pipeline acti-  
2 vities, and the most appropriate aircraft were consequently  
3 not available for resupply of more remote communities. One  
4 point which there is reasonably good documentation on in  
5 Alaska, deals with the area of the effect on the infrastructure,  
6 particularly the road infrastructure, and there is a typo-  
7 graphical error, I am sure on page 73 of the initial evaluation  
8 volume, where there is<sup>a</sup> quotation that says that "the expected  
9 50 percent increase in traffic along existing highways from  
10 Valdez to Livingood would increase annual maintenance costs  
11 during the construction period by"-- and it says "four thousand  
12 thousand", it is four hundred thousand dollars. That was the  
13 estimate of the added maintenance cost that would be incurred  
14 to the highway infrastructure of Alaska due to pipeline  
15 activity.

16 It is well documented, however, that  
17 the costs in fact reached one hundred and eighteen million. So  
18 the fact that there was this gross underestimate, I think is  
19 kind of revealing. I might also point out that the road  
20 infrastructure was not the one that was, only infrastructure  
21 that was heavily impact or utilized. There was greatly increased  
22 utilization of airport facilities and costs to be incurred in  
23 upgrading facilities in this area. That's all I have to  
24 say, Mr. Chairman.

25 MR. TEMPLETON: The next item is  
26 under the infrastructure heading is Planning and Administration.  
Dr. Nelson.





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1 DR. NELSON: As has been intimated,  
2 at least a couple of times previously, the Planning and  
3 Administration category is one which we are becoming increa-  
4 singly aware of, as perhaps having more significance than we  
5 originally anticipated. We do, however, have serious problems  
6 with the acquisition of data on it, given the time available  
7 to us to do the work. Our concerns are listed in <sup>the</sup> document on  
8 page 73. We are concerned about whether the existing admi-  
9 nistrative and infrastructure is adequate. We are concerned  
10 that there will be far reaching and large increases in demands  
11 for a wide variety of services, land use, medical, and other  
12 social services. We are concerned that the system will be  
13 able to respond effectively to these demands, and that expansion  
14 of planning and administrative infrastructure will be required.  
15 We are concerned about who will pay for these. We are concer-  
16 ned about how planning can be effectively coordinated, and  
17 who will devise plans for response. We have done some research  
18 on the reaction of other systems to somewhat similar problems  
19 elsewhere, and have been attracted particularly by some of the  
20 problems that have been encountered in coastal land use mana-  
21 gement in the United States, as a result of off-shore oil and  
22 gas development and related activities. Dr. England will  
23 address himself, I believe to some of the procedures that have  
24 been developed there, to deal with this sort of problem.  
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Accurate public accounts must be maintained to identify increased public costs, attributable directly or indirectly to project activity. Public costs in excess of increased income tax revenues generated by the project must then be shifted from Yukon and Canadian taxpayers to industry and ultimately the American consumer.

21 DR. ENGLAND: This section is rather a  
22 judgmental section, based on a very cursory examination of  
23 situation as we saw it prevailing in Yukon Territory so I  
24 would like to read a little more from my text in this  
25 particular case.

26 The precise nature and magnitude of any



1 increase in planning and administrative infrastructure costs  
2 for public services which might be anticipated as a result  
3 of this project in our opinion, alludes prediction at this  
4 time.

5                   Ultimately, it will depend upon the  
6 nature and magnitude of demands, directly or indirectly  
7 generated by project activity, and the degree to which the  
8 existing capacity of the public service infrastructure can  
9 cope with it.

10                   The Government infrastructure for land  
11 use, planning and administration was the one which we chose  
12 to examine as a case model. Our appraisal as I indicated  
13 is subjective and based upon a cursory examination of the  
14 existing infrastructure, and limited discussion with Federal  
15 and Territorial Government personnel.

16                   Government departments responsible for  
17 land use, planning and administration in the Yukon Territory  
18 are not equipped to respond effectively to a major development  
19 undertaking, we concluded. No clearly articulated land use  
20 policy exists for Yukon Territory and basic resource inventory  
21 and land use data are lacking. Responsibility for land  
22 disposition and use over most of Yukon Territory rests with  
23 the Federal Government. Exceptions are land, the right to the  
24 beneficial use, or to the proceeds of which have been  
25 appropriated to the Territory and are thus subject to the  
26 control of the Commissioner in Council.





1                               Lands within this category include  
2 highway right-of-ways, lands within the boundaries of all  
3 organized municipalities, and lands within most Local  
4 Improvement Districts.

5                               Decisions respecting the disposition  
6 and use of lands under Federal jurisdiction are generally  
7 made in consultation with Territorial authorities. However,  
8 the mechanism for consultation is a rather informal and  
9 unweildy advisory committee. About 30 persons representing  
10 all interested Federal and Territorial departments sit as  
11 members of the Land Use Advisory Committee. In the absence  
12 of clearly articulated goals and objectives, and of development  
13 strategy, Advisory Committee recommendations are of necessity,  
14 ad hoc. In 1974, the Advisory Committee processed only  
15 71 land use permit applications affecting an estimated 552  
16 hectares of land.

17                               This is a miniscule task compared to  
18 the one which will face government as a result of project  
19 activity. The pipeline alignment paralleling as it does,  
20 the Alaska Highway, and passing close to a number of  
21 communities, will frequently be located within areas  
22 appropriated to the Yukon Territory. Presently, the Territory  
23 has no land use regulations, or land use inspection capability.  
24 Consequently, it is not equipped to process or even issue land  
25 use permits, let alone monitor permittee compliance. The  
26 Territorial Government, through the Department of Local





1 Government provides a number of services to local communities.  
2 In Whitehorse, the single organized corridor municipality  
3 the Territorial Government assumes responsibility for developing  
4 municipal utilities and providing for police and educational  
5 services. Although the City has responsibility for planning  
6 use of unalienated lands within the City boundaries, these  
7 lands are owned by the Territory. The City has a nine man  
8 planning board, but no planning department. Consultants are  
9 engaged by the City to prepare subdivision and industrial  
10 area plans, as need dictates. The Territorial Government is  
11 responsible for developing services and engages consulting  
12 services to prepare plans for development of LID's.

13 Consultation with LID's is via locally  
14 elected Advisory Committees. In all LID's, with the exception  
15 of Haines Junction, lands within the LID boundary are  
16 controlled by the Territorial Government. The Territorial  
17 Government also assumes responsibility for development and  
18 supply of certain basic services in unorganized communities.

19 Responsibility for the land disposition  
20 and use in the vicinity of unorganized communities rests with  
21 the Federal authorities, however. Contact with these  
22 communities is of necessity informal since no formal  
23 mechanism for consultation, such as an elected Council or  
24 Advisory Committee exists.

25 In our view, it is clear from the  
26 above, that the Territorial Government carries large







With respect to the Alaskan experience, I would point out that the experience of the State of Alaska is most instructive in that it reveals the extent of Alyeska pipeline project activity impact on Govern-



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1 ment services. Preamble to a recent report on pipeline  
2 impact on Government expenditures by the Alaska Department  
3 of Community in Regional Affairs, 1976, states,

4 "The years 1974, 1975, brought a pulse of  
5 extremely rapid population growth to Alaska  
6 as construction of the Trans Alaska Oil Pipeline  
7 got underway. It was a period in which  
8 sudden unprecedented demands were made upon  
9 the State and many of its local governments  
10 to expand public services and facilities to  
11 accommodate growth. Pipeline impact was the  
12 popular term coined to encompass the wide-  
13 ranging effects of the pipeline project. The  
14 report recounts the nature and extend of im-  
15 pact and the response of the State of Alaska  
16 to the extraordinary demands generated by  
17 Alyeska Pipeline project activities."

18 The report findings are summarized as follows:

19 "The State disbursed 20 Million dollars in  
20 direct and discretionary pipeline impact  
21 grants to municipalities, generally for  
22 operating expenditures. The State allocated  
23 2 Million to State agencies to be spent  
24 exclusively to meet special impact conditions  
25 in the unorganized burroughs. The State fiscal  
26 year 1975 Operating Budget, appropriated 33.3







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1 Million in extra funds to expand State agency  
2 programs and services for impact growth. Local  
3 impacts including effects on population growth,  
4 public services, municipal debt and the State  
5 shared revenue program, were substantial. There  
6 were significant indirect and hidden public  
7 costs of pipeline impact such as wage inflation  
8 and loss of public employees to the private  
9 sector. Total actual State impact expenditure  
10 during the fiscal year 1975 -- this is 1975 only  
11 -- ranged from 89 to 126 Million, depending  
12 upon how certain costs are allocated. This  
13 estimate includes only actual budgeted costs  
14 to the State of Alaska."

15 That's all I have to say, Mr.  
16 Chairman.

17 MR. TEMPLETON: I think that I  
18 should say that our criticism of the Territorial Government  
19 is not of the individuals, but that it's of the size of the  
20 -- perhaps the budget is -- maybe the way you describe it,  
21 but we're not trying to -- when we say that they're not --  
22 the Territorial Government does not have these mechanisms,  
23 criticizing individuals in them, there's lots of dedicated  
24 people but they just don't have the organization or budget.

25 I think we could deal with every-  
26 thing except the conclusions if you want to stop at 5:00 or



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1 shortly after and discuss the last part of the infrastructure  
2 component which are the issues that we haven't discussed in  
3 the report.

4 THE CHAIRMAN: I wonder, Mr.  
5 Templeton, if it would be inconvenient to take our break  
6 now to get this concluding bit of the main submission and  
7 move directly into cross-examination after that, when we  
8 reconvene this evening.

9 MR. TEMPLETON: Yes, I think we  
10 wouldn't be more than -- we don't have -- we have perhaps  
11 twenty minutes at the most before cross-examination.

12 THE CHAIRMAN: All right and I  
13 understand it's proposed that we start up at 8:00 and run  
14 for about an hour and a half this evening, is that correct,  
15 Mr. Goudge?

16 MR. GOUDGE: Yes sir, if that's  
17 convenient -- no more than that.

18 THE CHAIRMAN: All right, at  
19 this point then, we'll stand adjourned until 8:00 o'clock.

20 (PROCEEDINGS ADJOURNED).  
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1 PROCEEDINGS RESUMED PURSUANT TO ADJOURNMENT

2 MR. GOUDGE: Mr. Chairman and Members of  
3 the Board, perhaps if you are ready we could reconvene and  
4 Mr. Templeton could complete his evidence in chief.

5 MR. CHAIRMAN: Mr. Templeton, whenever  
6 you are ready, please.

7 MR. TEMPLETON: Thank you.

8 We discussed the life patterns, the  
9 local economy, the man/land heritage, and the infrastructure  
10 components of the human environment, and the only thing  
11 left were those items on Page 7 of the hand-out, which have  
12 an asterisk beside them under the infrastructure section,  
13 which are the components that have not been studied in  
14 detail. I would ask Mr. Mair to speak on those.

15 MR. MAIR: Mr. Chairman and Commissioners,  
16 as has been pointed out, there are three issues we have  
17 not yet been able to address. They are municipal utilities,  
18 communications and education.

19 Under the municipal utilities, I suppose  
20 the general concern is the ability of the municipality to  
21 respond to the sudden increases in population in economic  
22 activity, and what the cost of that demand might be. I have  
23 itemized five points in the form of questions. The first  
24 question, will the, can the present services adequately  
25 cover increased demand? A concern. Second is: If not,  
26 will there be a decline in the quality and the quantity of





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1 the services provided to the local people? The third concern  
2 or question is: That if there is a need for increase in  
3 services and the decision is made to so do, is there the  
4 borrowing capacity in respect of cities or municipalities  
5 if the services are increased, may they possibly be  
6 overbuilt for post-construction periods, and then the local  
7 people will find themselves carrying an exceedingly heavy  
8 debt load for capital structures, and so on -- services, that  
9 they don't really need? That of course leads to the final  
10 concern in this whole thing is that who should pay for the  
11 upgrading of services, the provision of additional services,  
12 and so on that may be required as a consequence of this kind  
13 of very major development, but with a relatively short term  
14 duration.

15 Under communications, I suppose the  
16 concerns are very much along the same line, the possibility  
17 of overburdening of the existing infrastructure and the  
18 consequent impairment of quality of service available to  
19 residents, if short-term expansion required to meet additional  
20 need created by the project, who should pay it? I think we  
21 can add also, that if by any chance the requirements are  
22 such that fairly substantial or permanent facilities, services  
23 are built in, again with Yukon residents be left with very  
24 costly services beyond their regular needs, and who's going  
25 to pay for them?

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1                   The cost could be to the point  
2 where they simply couldn't carry them. In the area of  
3 education, there are five points that I would like to make  
4 but -- of concerns that we have at the outset, we have to  
5 say that it's an exceedingly complex and sensitive area and  
6 it's one that we feel demands very detailed consideration,  
7 however, these are some of the points that come to mind that  
8 are of concern to us.

9                   First, are the present facilities  
10 adequate to carry the increases in requirement during the  
11 construction period. If the present facilities are not  
12 adequate, who will build the additional facilities and how  
13 will they be financed. The third one then is, will this  
14 leave the communities overbuilt for post-construction period,  
15 again with a heavy debt load. Fourth, the quality and  
16 kind of education -- there are a number of points under  
17 that, that a concern we have that the people from the  
18 outside who come in for the period of the construction of  
19 the pipeline and bring their families, very probably, may  
20 wish to have different curriculum -- different teaching than  
21 that that is desired by the local or northern people, so it  
22 raises a concern there.

23                   There's the question of the  
24 possible impairment of quality of the education in any event  
25 if over taxes the teaching staffs and finally, in that area  
26 and in particular, there's the concern that the local people



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1 in the smaller communities in particular, are seeking more  
2 local control and orientation to their needs, it sort of ties  
3 in to the remark I made earlier about the people from outside  
4 wishing perhaps a different curriculum -- a different  
5 approach, but it seems likely that the heavy pressures that  
6 will be put on the educational system and the desires and  
7 demands, indeed, of the people from outside, could very likely  
8 be quite opposed to the outlook and the needs of the people,  
9 particularly the native people, who have been raising very  
10 legitimate concerns about education.

11 Finally, a point that we sometimes  
12 tend to overlook because we speak in particular of the con-  
13 struction period, but we take into account, the staff required  
14 permanently for the operation of the pipeline is, according  
15 to -- it seems we have 190 -- if these are recruited largely  
16 from outside, they could very well change the balance within  
17 some of the communities in the Yukon and thus, create a continuing problem  
18 of conflict in an attempt to resolve this whole question of  
19 what direction the educations will take and who shall in-  
20 fluence it and so on, so these are -- some of them are very  
21 real concerns that we have in the education field, but I'm  
22 sure there are many beyond that.

23 MR. TEMPLETON: This concludes  
24 the discussion of impacts that we started with this morning  
25 except for the matter of the conclusions we have drawn.

26 Now, we recognize that this is



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1 not a complete environmental impact assessment because of  
2 the early extensive number of parameters that we feel should  
3 be evaluated but it was all that we could do with the  
4 material available and the time we have. We started in --  
5 early in August and this is as far as we got and we recognize  
6 your time frame and so we thought we should present it at  
7 this time, even though it is incomplete.



1 But we tried to draw some conclusions even though it is incom-  
2 plete and I'd like to read that now.

3 This Initial Environmental Evaluation,  
4 and incidentally the word "Initial" is taken from the E.A.R.P.  
5 process. It's their definition, because it will be used in  
6 those hearings as well. It does, however, provide insight into  
7 the nature and magnitude of the changes that should be an-  
8 ticipated and, as such, alerts us to the problems. Especially,  
9 with careful preplanning, there could be some transitory  
10 and long-term benefits for Yukoners, such as employment and  
11 opportunities to improve existing social conditions. But  
12 there is considerable potential for adverse impact; to native  
13 peoples residing in smaller communities, to public safety  
14 in terms of increased crime, to medical services through in-  
15 creased demand, and probable decline in quality, to inflation  
16 particularly for those not associated with the project. I  
17 think I've left something out here, but regarding wages,  
18 parks, reserves, sanctuaries through conflicting land use,  
19 to local transportation facilities being diverted to pipeline  
20 use and thus not available to local use, and to existing  
21 government planning and administrative frameworks through  
22 over-demand on their services. In addition, there are areas  
23 of concern which we have not examined in detail, namely:  
24 tourism, recreation and aesthetic impacts, overloading of  
25 existing education and communication and utility services, and  
26 the impact on other industries such as service and retail, and







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1 mining. Further, we are concerned that local residents have  
2 little opportunity to address themselves to these issues.  
3 In essence, we view our work thus far as a problem definition  
4 for human environment. But, even at this level of information,  
5 we believe that the summary we have presented, together with  
6 the documentation in the accompanying exhibit, clearly indi-  
7 cates the absolute necessity for controls if impacts are to be  
8 kept to an acceptable level on any project of this scale.

9  
10 It is true that the Mackenzie Valley  
11 Pipeline Inquiry heard many control recommendations, particu-  
12 larly related to the protection of the physical and biological  
13 environment. However, ways to mitigate damages and enhance  
14 benefits to the human environment were very limited. Thus,  
15 the recommendations that Justice Berger will make as terms  
16 and conditions for a project will probably represent the  
17 major overall documentation on this topic.

18 While this Panel has not yet examined  
19 the details of controls or the enforcement mechanism, it is  
20 apparent to us that the impact of this project on the physical  
21 and biological environments can only be held to us,  
22 is an acceptable level, with controls detailing the performance  
23 required by the pipeline company with an efficient organization  
24 to ensure compliance throughout the final design, construction  
25 and operation of the pipeline, and with an appropriate penalty  
26 system for failure.



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1 The human environment poses a more compelx problem; what is  
2 needed is a set of carefully planned incentives and dis-  
3 encentives or social guides designed to enhance benefits and  
4 limit damages.

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1 Government agencies at this time are  
2 inadequate to implement an enforce control and to develop the  
3 other mechanisms required to achieve these results. Thus, a  
4 major effort will be necessary in government and the people of  
5 the Yukon before any pipeline project is initiated.

6 Furthermore, we must recognize that,  
7 while the pipeline company will endeavour to do what is requir-  
8 ed of it, if the desired results are to be achieved, a carefully  
9 planned program must be developed for mitigating the damages  
10 and enhancing the benefits to the human environment and this  
11 must be done well in advance of implementing pipeline construc-  
12 tion.

13 In this context, we most heartedly  
14 agree with Mr. Justice Berger's comments on XI of his letter  
15 to the Minister of Indian Affairs and Northern Development,  
16 "There is a myth that terms and conditions that will protect  
17 the environment can be imposed, no matter how large a project  
18 is proposed. There is a feeling that with enough studies  
19 and reports, and once enough evidence is accumulated, somehow  
20 all will be well. It is an assumption that implies the choice  
21 we intend to make. It is an assumption that does not hold true  
22 in the North."

23 This comment applies to the Alaska  
24 Highway route as well as the Mackenzie route. We are concerned  
25 that some seem to interpret the Berger Report as saying that  
26 the Alaska Highway route is preferable and therefore an



1 unconditional approval is warranted. We do not think that the  
2 Berger Report gives any grounds for this interpretation. The  
3 theme throughout the Report is the need for controls and  
4 careful advanced planning by the applicant, the government, and  
5 most particularly, the people.

6 At a later date, we hope to suggest  
7 in some detail how this may be done. In the meantime, we have  
8 identified some basic principles which apply to the measures  
9 we think are necessary. However, the mere adoption of princi-  
10 ples is not enough. Controls and management measures need to  
11 be specific and detailed and backed up by administrative author-  
12 ity with penalties for non-compliance.

13 The principles are: first, the  
14 natural environment is a Canadian heritage for use and enjoy-  
15 ment by future generations. Controls should reflect our job  
16 as trustees of that heritage.

17 Second, pipeline development should  
18 not impose unfair burdens on particular individuals or groups.

19 Three, the pipeline company shall  
20 assume responsibilities for minimizing social and economic  
21 problems resulting directly or indirectly from project acti-  
22 vity. For example, increased cost of highway maintenance, loss  
23 of regional transportation carriers to communities.

24 Four, decisions on appropriate manage-  
25 ment programs be made in consultation with the communities  
26 ultimately affected by the project.





1                                 Five, wherever possible, payment for  
2 damages should be in kind, rather than in dollars.

3                                 Six, the public, both northern and  
4 southern has a right to know what planning, organization and  
5 execution mechanisms for control is developed and it should  
6 have a means of monitoring the success of them.

7                                 Seven, government and particularly  
8 the federal government is fundamentally responsible for ensur-  
9 ing the foregoing principles are met.

10                                Finally, we conclude that if a proper  
11 management system, which embodies these principles is not in  
12 place before construction, the project should not be allowed  
13 to proceed.

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1 MR. TEMPLETON: That's the end of our  
2 presentation, Mr. Chairman.

3 MR. CHAIRMAN: Thank you very much for  
4 that presentation Mr. Templeton and gentlemen. I have no  
5 doubt that it will be of great assistance to this Inquiry.

6 I'll ask now, Mr. Goudge, to take us  
7 through the list for cross-examination?

8 MR. GOUDGE: Yes, sir, several Counsel  
9 have spoken to me yet, and indicated that they would prefer  
10 to go a little out of order, so I'll call the list subject  
11 to that, if I may, sir. We would begin with the Whitehorse  
12 Chamber of Commerce, Mr. Morrison; the Yukon Transportation  
13 Association, the Yukon Association of Municipalities and  
14 the City of Whitehorse, Yukon Chamber of Mines, Yukon  
15 Association of Social Workers. Is Ms McPherson here? She  
16 indicated to me she had one or two questions, perhaps we  
17 can call her in the morning. That would bring us down then,  
18 sir, to Mr. Horton for the Government of Yukon.

19 MR. CHAIRMAN: Thank you. Mr. Horton?  
20 CROSS-EXAMINATION BY MR. HORTON:

21 MR. HORTON: Mr. Templeton, I will  
22 address my questions to you and you can sort of shield the  
23 panel and pass them on to, whoever, if you don't want to field  
24 them yourself.

25 I'd first like to ask you something  
26 about one of your initial comments, where you were commenting



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1 on the change in pipe size of relatively recent date, and  
2 there might still be changes in route, even assuming there is  
3 -- changes in alignment, even assuming there is approval in  
4 principle given to the Alaska Highway route.

5 First of all, I wonder whether there is  
6 any reason to think that a change in the pipe size is of any  
7 significance with respect to either impact on either physical,  
8 biological, or human environment? I'm thinking purely in  
9 terms of the size of the pipe.

10 MR. TEMPLETON: Well the size of  
11 pipe in itself doesn't materially affect it. It might affect  
12 the weights of material hauled, but when you change the pipe-  
13 line, usually in any way -- you quite often affect the  
14 location of the compressor stations and the stockpile sites,  
15 and ancillary things, rather than the pipe itself.

16 Q So, the chief impact  
17 as a result of change in pipe then would be from those factors  
18 rather than the pipe itself?

19 A Yes.

20 Q Has there been, to your knowledge,  
21 in fact, any change in the location of the compressor sites  
22 and the construction sites, as proposed by Foothills as a  
23 result of the change in the size of pipe?

24 A Yes, the compressor stations  
25 were changed when they changed from 42 to 48.

26 Q To more sensitive areas?





1                   A           I can't answer that. I -- Ray  
2 do you have a comment on that?

3                   DR. ENGLAND: No, I'm afraid I don't.

4                   MR. TEMPLETON: I'm sorry, I don't  
5 think it was particularly more sensitive, but I'm not sure.

6                   Q           Are any instances that you are  
7 aware of, where recommended change in the precise route or  
8 alignment in order to minimize an adverse impact on the  
9 physical or biological environment would have a consequential  
10 increase in adverse impact on the human environment?

11                  A           Oh, I think I got caught in a  
12 double negative.

13                  Q           Okay, well we'll go back one  
14 step behind that question.

15                               I believe you mentioned that there  
16 might have to be some portions of the line that will have to  
17 be re-routed, in order to minimize or mitigate adverse effects  
18 on either the biological or physical environment. Is that  
19 correct?

20                  A           Yes, I think there's probably  
21 going to be a revision around Whitehorse. I think that's  
22 the -- the present alignment is not that good and I think  
23 we're looking at a better route, because of the Ibex River  
24 area.

25                  Q           And I suppose there might also  
26 be other areas, perhaps more minor changes?





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1                   A           Yes, I think so. I think we  
2 suggested our revision around the Slims River, and I think  
3 there has been a revision around Pickhandle Lake.

4                   Q           Do you feel that you have  
5 already identified all of the sites of change in route?

6                   A           No, 'I don't think we have, no.  
7 We're doing an initial evaluation and this process seems to  
8 go on forever of changing for either economics or some other  
9 reason.

10                  Q           Okay. Of the changes that have  
11 already been proposed, or that you can foresee being proposed  
12 for the purpose of minimizing adverse impact on the physical  
13 and biological environment, are there any of those that will  
14 end up increasing adverse impact on the human environment?

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1 A I don't think I know any.  
2 I don't know of any at the moment.

3 Q Well, I believe that sort  
4 of time and again, you make the point that effective controls  
5 can minimize, if not completely eradicate, many of the  
6 adverse impacts. Are you able to make any assessment of the  
7 existing Foothills proposed controls or measures to minimize  
8 impact -- adverse impact on the physical and biological  
9 environment and particularly, I'm wondering whether there  
10 is more that they should be doing that they have not already  
11 proposed and stated their intention to do?

12 A Well, I think the controls  
13 are inadequate at this time and it isn't only Foothills,  
14 it involves the people and the Government and the Territorial  
15 and Federal Government, so we don't consider that the controls  
16 are in any way spelled out at this time.

17 You know, there are suggestions  
18 and we have put them in our report as well, but this is  
19 only at an early stage.

20 Q Okay, now, are the  
21 inadequacies that you see, ones which relate to the partic-  
22 ular method by which the controls will be implemented or  
23 are there things which they are in principle, failing to  
24 propose to do?

25 A Well, I think that's a  
26 hard question to answer because I don't think that what --



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1 -- I don't think they have worked out a control mechanism  
2 as we understand it. It involves planning and a great range  
3 of things and they have suggested that they will do certain  
4 things in their application, but that isn't the controls  
5 that we're talking about, same with the recommendations that  
6 we have put in from to time, the whole control mechanism  
7 is how you're going to achieve something.

8 It's easy enough to say you're  
9 going to minimize impact, but that doesn't really mean any-  
10 thing until you show how you're going to do it.

11 Q I realize and I'm  
12 wondering what stage of the game is anybody at right now.  
13 They're simply saying that we're going to minimize but nobody  
14 knows how to do it or if we're going to minimize and we know  
15 how to do it, but we still haven't worked out the precise  
16 method of implementation.

17 A Well, I think that's  
18 sometime away. That's a pretty -- that's quite an involved  
19 process because it must of necessity involve the people  
20 that are going to be impacted and you know, they're just  
21 starting now through these hearings, to understand what the  
22 impacts are and it's going to take some time to work out the  
23 control and, of course, the Territorial and Federal Governments  
24 have to get involved too.

25 Q Now, in the time that  
26 needs to be taken, are you thinking more in terms of the



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1 impacts on the Human Environment, the social and economic  
2 impacts as distinct from the physical and biological environ-  
3 ment?

4 A No, I think they all have  
5 to be done. I don't feel they are the controls necessary  
6 for the biological and physical environment either.

7 Q What time span are we or  
8 the Inquiry or anybody else looking at?

9 A Well, it certainly couldn't  
10 be done by August the 1st. There seems to be a kind of --  
11 a point of no return isn't it?

12 Q The witching hour.

13 A We, I think, would feel  
14 that we could start to come up with some kind of a report  
15 by the end of the year, but that doesn't solve the situation  
16 either because it involves more than -- we're southerners  
17 coming up telling the people here how to do things and if  
18 they're not involved, the planning system isn't going to  
19 work.

20 Q Can all of the necessary  
21 controls in fact, be worked out?

22 A I would think so, yes.

23 Q I'm thinking in terms  
24 of all of the different problems of impact on the physical,  
25 biological and human environment.

26 Are there any impacts in respect







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1 of which it will not be possible or you think it would not  
2 be possible for controls to be worked out?  
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17 Q Okay, I accept that there  
18 must be inevitably all kinds of trade-offs, but let's assume  
19 all of the trade-offs have been made and it gets down to this;  
20 that the determining factor is going to be whether the control  
21 mechanisms that you speak of can be worked out or not.  
22 Assuming that hypothetical situation, can the controls  
23 in fact be worked to deal with all of the problems, all of the  
24 problem areas that you've identified.

25 A Well, perhaps I'm missing  
26 your point somewhere --



1 Q I'm merely suggesting that,  
2 to, asking you to answer me without taking into account all  
3 of the trade-offs that have to inevitably enter into the  
4 decision, and assume what, well, maybe from Foothills' point  
5 of view or any other applicant's point of view, what might be  
6 the worst of all possible worlds, that they would have to  
7 implement all of the controls you suggest. Could they all  
8 be implemented?

9 A Oh, I see. You're saying,  
10 would they go ahead with the project if --

11 Q No, I'm not asking you,  
12 would they go ahead and pay the price. I'm asking, can they  
13 in fact be implemented?

14 A I think so. I think it can  
15 be done. But I don't think it's only Foothills, you know --

16 Q No, I realize --

17 A Yes.

18 Q Yes. One of the members  
19 of your panel referred to native population statistics and  
20 distribution of native population amongst the communities. I'm  
21 wondering whether, in the process of <sup>/doing</sup> that research, any in-  
22 formation was found and is now available through you, related to  
23 population numbers and distribution of the native population  
24 prior to the building of the Alaska Highway. The reason I  
25 ask is that, is that we're kind of concentrating on the Alaska  
26 Highway corridor. And we've got some sort of distribution figures



1 for along that corridor. I'm wondering what things were like,  
2 if you know what things were like, prior to the Highway being  
3 put in there.

4 A I think Dr. England gave  
5 that. Didn't you, Ray?

6 DR. ENGLAND: Quite simply, we did  
7 not attempt to look back that far. We were attempting to  
8 look at the current situation, but as I indicated, we were  
9 unable to reconcile the various figures we did find.

10 Q You had enough trouble  
11 with the current.

12 A Yes.

13 Q Under the heading of Public  
14 Safety, I'm wondering why you have emphasized crime rate,  
15 rather than instance of crime and I believe, Dr. England, it  
16 was you who remarked that you felt that the crime rate was  
17 of greater relevance and importance than the incidence of  
18 crime.

19 A Yes, because at least a  
20 rate is based on a consistent form of calculation. You know,  
21 you're relating incidence to a common base, whether it's per  
22 thousand population, per hundred thousand population. I  
23 would point out, however, in a situation where the incidence  
24 of crime increases, that in itself, constitutes an impairment  
25 to, say, residents who reside in an area, obviously. But it's  
26 my personal judgment that it is rate that is more relevant,





1       because you are talking to a consistent base. If obviously,  
2       if a population expands, you expect an expansion in crime.  
3       Now it is the rate at which that increases, that surely, be-  
4       comes relevant in that situation. If the rate increases more  
5       then you would have anticipated it just because of the simple  
6       population increase, there's obviously a number of other  
7       factors at play; whether it is stress that's been induced into  
8       the situation, or whatever. So from that point of view, I say  
9       it is the rate that is more relevant.

10                               Q       Theoretically, it would be  
11       possible, further, to be a substantial       increase in the  
12       incidence of crime, and yet a decrease in the rate of crime.  
13       Wouldn't it?

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1 A That is correct.

2 Q The reason I bring that  
3 up is, I suppose, to suggest that possibly when looking at  
4 RCMP manpower and the necessary court manpower and court  
5 staff manpower, that the incidence of crime in fact is going  
6 to be an important factor --

7 A The cost of judiciary  
8 process.

9 Q Yes.

10 A Enforcement will be in-  
11 creased with an increase in incidence, absolutely.

12 Q You -- or do you see any  
13 presently existing unused capacity so to speak, in the  
14 judicial process and the enforcement -- the police enforce-  
15 ment -- in the Yukon to pick up at least some if not all,  
16 of the increased incidence of crime?

17 A I'm afraid I don't have  
18 that degree of insight. I couldn't answer that question.

19 Q You're unable also, I  
20 suppose, to make any guesstimate of -- for example, the  
21 additional number of RCMP that would be necessary simply  
22 to preserve the existing ratio of police to population?

23 A Yes, I am unable to do  
24 that but I am aware that the RCMP have toured the Alyeska  
25 project and examined conditions in the camps, conditions in  
26 the City of Fairbanks and I should imagine they have a per-



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1       spective on what would be required to respond to a situation  
2       here.

3                               Q       Under the heading public health,  
4       you seem to emphasize that there is certainly a great danger  
5       for a very substantial increased demand for public health  
6       services.

7                               Are you able to make any differen-  
8       tiation between the amount of that that would be accident  
9       related -- job accident related on the one hand and not job  
10      accident related on the other hand?

11                           A       No, I'm not because if  
12      you examine our submission, you'll find we did not attempt  
13      to develop a prediction of the population increase that  
14      might transpire as a result of project activity, assuming  
15      this was an uncontrolled situation or a situation comparable  
16      to the Alyeska situation.

17                           Also, too, we have a firmer hand  
18      I would say, on the actual size of the labour force that  
19      might be involved in the project. I think it would be  
20      also quite difficult to address the question of project  
21      injury rates.

22                           Q       Now, to transport, you  
23      again seem to emphasize that the Yukon and the Governments  
24      in the Yukon, can certainly expect higher highway maintenance  
25      costs and this seems to be somewhat at odds with previous  
26      evidence. I'm wondering why it is that you say apparently



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1 with such emphasis, that there will be higher highway  
2 maintenance costs.

3 A Probably because there  
4 was one of the few straws to grasp on from the Alaskan  
5 experience which was at all documented and certainly it's  
6 effectively documented there that the activity associated  
7 with the pipeline, certainly did have a considerable impact  
8 on the highway system and as you'll see the figures quoted  
9 there, they were very substantially impact, far more than  
10 anticipated.

11 Q You haven't seen any  
12 magical qualities about the highways in the Yukon that they  
13 would have much greater endurance?

14 A No, I'm afraid I can't  
15 comment on that.

16 MR. TEMPLETON: On that point,  
17 I think that a number of years ago, the American Association  
18 of State Highway Officials conducted a very extensive, full  
19 scale test and ran loaded trucks around loops and so that  
20 there was over a million passes of a truck with a certain  
21 weight on a particular loop, to test the failure of pavement.  
22 This is pavements and I realize you've got quite a bit of  
23 gravel, but I think the failure is still linked to the same  
24 thing and there wasn't any question at all, that the weight  
25 of the trucks was the most predominant feature, rather than  
26 the number of passes and so, if you're hauling a lot of





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1 heavy material, the ratio of the impact on the highway --  
2 let's say the highway now, with a fairly light traffic on  
3 it -- light wheel loads -- there isn't any question that if  
4 you're hauling heavy material, that you're going to materially  
5 affect the surfacing and the maintenance cost.

6 I don't think that the -- this  
7 test was conducted with the idea of convincing the States to  
8 have their license fees geared to the actual costs. I don't  
9 think that any State or province in Canada had enough courage  
10 to put the actual costs where they are, so that license  
11 fees do not compensate for the maintenance of the increased  
12 costs.

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1 Q Correct if I'm wrong, but I  
2 thought when you were just finishing off the last couple of  
3 pages of your main submission today, the issues not yet  
4 addressed, I believe you overlooked communications. I'm  
5 wondering whether there was some reason for that, whether that  
6 was intentional, or accidental, or whether I wasn't in fact  
7 listening close enough and you did say something about it?

8 A On which was that?

9 Q Page 75.

10 MR. MAIR: It was covered in the case  
11 of concerns over communications were very much the same as for the  
12 municipal utilities. There's a question of overburdening  
13 the existing infrastructure and consequent impairment of the  
14 quality of the service that would be available to residents.  
15 The second point is that it's a short term expansion required  
16 to meet the additional need created by the project raised the  
17 question of who pays for those short term expansions and if  
18 indeed it turns out that a fairly substantial or permanent  
19 installations are put in place, then it raises the question of who  
20 pays for it. Do the Yukon residents get left with the  
21 cost, the debt load, the cost of servicing, after the pipe-  
22 line construction has been completed. Because you get higher  
23 quality facilities as a general rule, the maintenance  
24 operation cost and so on will be higher and it will be the  
25 residents that will have to pay for it.

26 Unless, indeed somehow or other there's



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1 some other arrangements. So again, it will be the question  
2 of who pays?

3 Q I have no further questions,  
4 Mr. Chairman.

5 MR. GOUDGE: Mr. Chairman and Members  
6 of the Board, Ms McPherson is here now, and I wonder if she  
7 could go next, please.

8 CROSS-EXAMINATION BY MS MCPHERSON:

9 MS MCPHERSON: There are a couple of  
10 areas that I'd like to explore if I could.

11 The first is that of social compensation.  
12 In your conclusions, you outline in Number 5 wherever possible  
13 payment for damages should be in kind, rather than in dollars.  
14 Now, perhaps Mr. Templeton you can direct this to where it  
15 should go.

16 It's fairly easy to look at compensation  
17 for things like property damage, and physical damage, that  
18 sort of thing. When we're looking at things like disintegration  
19 of community structure and increased alcohol abuse, family  
20 break-downs, those types of impacts that you have referred  
21 to in your discussions. I wonder if you could explore the  
22 possibility of social compensation for those areas?

23 DR. NELSON: You do, of course, raise  
24 a very thorny problem. I don't think that we are in any  
25 position to deal with it in any kind of comprehensive way at  
26 the moment.



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1 We have suggested that compensation be  
2 made for various kinds of social impacts, but the ones that  
3 we have mentioned, I think, are those that is probably easiest  
4 to deal with. Education, for example, although it represents  
5 a lot of intangibles, can be priced in a more or less orthodox  
6 way and that you can talk about the number of additional  
7 teachers that you might need, and the number of additional  
8 facilities, and so on, that you might need.

9 You can talk about the price for addition-  
10 al language education, or something of that sort, if that  
11 is identified as an impact that the local people want to be  
12 concerned about.

13 But, I don't think that we are in any  
14 position to really directly address the matter of how one  
15 would compensate for family break-down, or for crime at this  
16 point. I think that we would want to spend a little more  
17 time thinking about it.

18  
19 I'm assuming when you're talking  
20 about compensation, you're talking about some potential for  
21 change or residual over and above what's happened after you've  
22 introduced as many controls as you possibly can.

23 But, in this area too, it's very  
24 difficult because in a way the controls have a direction.  
25 That is, a control may imply a trade-off. A control may  
26 imply that you are in fact making a decision to benefit one





1 group rather, more than another, and that's a very difficult  
2 question that we haven't really examined exhaustively yet.

3 Q I guess I'm thinking too of  
4 things other than financial reimbursement. Either in terms  
5 of manpower, or whatever. You know, it's certainly a  
6 difficult issue from anyone's standpoint, but I was wondering  
7 if in looking at compensation you had explored various  
8 other alternatives, other than the financial reimbursement?

9 A Well, yes, I perhaps went  
10 beyond your question. We have addressed today a few of the  
11 types of controls that we think would be needed to mitigate  
12 the effects of social change.

13 We talked about an information agency  
14 which would provide the data that would be needed to fore-  
15 warn people of the possibility of change and put them in a  
16 position to be better able to deal with it. We've talked  
17 about the additional funding that is required to provide  
18 personnel with the training that's needed to assist people with  
19 different types of social problems.

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1 But we aren't in any position yet to  
2 specifiy these in detail because some of the areas that involve  
3 that sort of thing are areas in which we have not as yet done  
4 any detailed research. More than that, it may be very diffi-  
5 cult to deal with them even after the initial impact phase  
6 because there will not be a data base. You may have to do  
7 survey research which will involve sampling problems and inter-  
8 pretations problems because they're short-term and limited as  
9 far as the number of people involved is concerned.

10 Q Will these be done?

11 A Well, I'm not in any position  
12 to answer that.

13 Q Often because of the diffi-  
14 culty involved, they're not done and I think that's the kind of  
15 area that we're looking for some kind of commitment for get-  
16 ting around the more difficult problems.

17 A Well, I would simply say that  
18 I think it's absolutely necessary that surveys of this kind be  
19 undertaken in areas where it's clear that there is no adequate  
20 data base at the moment, the cost of living area, for example  
21 would be one.

22 MR. FOX: Are you also thinking about  
23 making provisions for, let us say, rehabilitation of people  
24 that have been adversely affected by the social environment,  
25 that sort of thing. For example, alcoholics, how might this be  
26 handled. It seems to me that there are going to be, this will



1 be an important problem that does need to be addressed and that  
2 the machinery should be set in motion in advance for doing that  
3 sort of thing. That's the kind of compensation that you're  
4 talking about, is that right?

5 Q Yes, that's part of it. It's  
6 the secondary kind of effects that are not easily identifiable  
7 and relate to any particular area, but they do increase as the  
8 project goes on.

9 MR. FOX: One point that I think  
10 needs to be made here is that we need to, of course, try to  
11 anticipate these and conduct the studies necessary to set  
12 up machinery to be preventive as, to provide as much prevention  
13 as possible from these things occurring. But we also have got to  
14 recognize that we're dealing in an area where there is going to  
15 be a great deal of uncertainty and what we really need is a  
16 system that is sufficiently adaptable that we can make adjust-  
17 ments as we go along to deal with the kinds of problems that  
18 you're talking about and that needs to be given a great deal  
19 of thought, It's one of the things that I think we hope to  
20 do more on in this next stage of our work with regard to the  
21 program, because I think it's the developing adaptable mechan-  
22 isms to deal with a very complex set of social issues is one  
23 of the most difficult problems that we need to address.

24 Q Okay, thank you.

25 DR. NELSON: On the same point, if I  
26 can just make one point that I should have made earlier. I





1 think another area that would be very fruitful to explore would  
2 be what I would call comparative research on the problems that  
3 have arisen in areas that have similar types of change. For  
4 example, the North Sea Arctic Gas Developments have involved  
5 impacts that are comparable to those that one could envision  
6 here and in Scotland, in the Shetlands, a series of arrangements  
7 have been made to try and deal with these. Now, we have talked  
8 about getting information on that and I think we will attempt  
9 to do it. Similarly, we alluded in our report to the ways in  
10 which the United States have attempted to deal with these kinds  
11 of problems in the coastal zone, where you have off-shore  
12 energy development, but we haven't had time to really look at  
13 those in detail. So comparative research in/similar proposed  
14 changes or actual changes would be very useful.

15 MR. TEMPLETON: For such a short  
16 question, you're getting an awful long answer.

17 MS MCPHERSON: I'm glad to see it's  
18 been given some serious thought.

19 A I think the principle that  
20 we're trying to establish is that a developer, regardless  
21 it is whether/in the private or public sector, should be responsible  
22 for his actions in the social and environmental field and he  
23 may not be able to compensate in direct ways, but he can do  
24 certain things that perhaps as a trade-off or as a mitigated  
25 measure or whatever, but if he knows that he has to, that he's  
26 responsible for that action, perhaps he will address himself to





1 it and that's what we're trying to say.

2 Q Okay. The other area that  
3 I wanted to pursue just briefly is the whole area of fixed  
4 income and I'm sure you're aware that Yukon has a very high  
5 percentage of families and individuals existing on a fixed in-  
6 come, whether it be social assistance through Territorial  
7 Government or Indian Affairs, Canada Pension, Disability  
8 Pension, whatever. You've outlined some of the ways in which  
9 those type of people could be assisted. I wonder if you could  
10 elaborate on that?

11 MR. FOX: Well, I don't know how  
12 good a position I am in to elaborate much beyond what is in  
13 the study, but we recognized, of course, as you know from the  
14 document, that there are people on fixed incomes, that there's  
15 a good probability that there will be inflation and that this  
16 inflation will result in their real income declining and that's  
17 the problem that you're getting at, as I understand it.

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1 Now, the one thing we felt, on the  
2 one hand it's necessary to try to minimize this level of  
3 inflation in every we can. But beyond that, we felt that it  
4 would be necessary to try to determine what is the effect  
5 on real income, of people on fixed income, and then make  
6 specific provision for payments to those people beyond, to  
7 compensate them for the, you might <sup>say</sup> the losses that they're  
8 incurring as a result of the inflation due to the pipeline activit  
9 Now, we haven't worked out mechanisms, but I believe that's  
10 the kind of thing that we have talked about, and that we  
11 have had in mind.

12 In order, and that's one of the  
13 basic principles that's being pointed out here, that the  
14 pipeline development should not impose unfair burdens on par-  
15 ticular individuals and groups. And what you're suggesting  
16 is that there will be groups that will be unfairly affected  
17 unless some specific provision is made there.

18 Q Yes, over and above that  
19 I'm suggesting that, I think, the Alaska experience found  
20 the things like rent <sup>reviews</sup> were not particularly effective to  
21 assist people on fixed income. You are suggesting rent  
22 reviews or rent controls, I'm not sure which you're meaning.

23 A You want to comment?

24 DR. ENGLAND: A reference was made  
25 to rent control, not rent review like was in Alaska, and I  
26 think the point that is being made is that when you talk a bout real



1 income, we are talking about having to fulfill those basic  
2 needs and wants which include your housing, clothing, food,  
3 and we are suggesting that a mechanism would have to be put  
4 in place to ensure that the people on fixed incomes were still  
5 able to satisfy these at least at a level comparable to what  
6 they were able to achieve prior to activity.

7 Q Do you have any estimates  
8 of what the additional payments would be, based on a percen-  
9 tage of the people on fixed income in the Yukon?

10 A No, because ultimately  
11 that would depend on, again, what degree of effectiveness  
12 of any controls that were implemented to try and control  
13 inflationary pressures and that, and to the degree to which  
14 rents were controlled. So, no, I'm afraid I couldn't  
15 begin to give you an estimate on that.

16 Q Okay, that's fine. Thank  
17 you. I have no further questions.

18 MR. GOUDGE: Mr. Chairman, members  
19 of the Board, I'd like to conclude this evening if I might,  
20 by offering the members of the public who might be here, an  
21 opportunity, if they wish, to question the Panel, so that we  
22 could do that segment of this Panel now.

23 MR. CHAIRMAN: Would you step forward  
24 please, to one of the microphones?

25 CROSS EXAMINATION BY IRWIN ARMSTRONG

26 MR. ARMSTRONG: My name is Irwin  
Armstrong,





Cr Ex by Mr. Armstrong.

1 and I've had considerable experience dealing with Indian  
2 people since I came in to the Yukon in '51 with a mine summer camp  
3 When I first took the contract, they told me that I would  
4 never be able to handle that contract with a crew of local  
5 Indians because they're the worst savages in the North  
6 American continent. I told them there must be something  
7 wrong with their missionary work here in the Yukon because  
8 where I grew up in Ontario, some of the best farmers and  
9 tradesmen are Indian. So after getting acquainted with  
10 the Baptist, the Anglican and the Roman Catholic clergymen,  
11 I could see where they were at fault and I think Daniel Johnson  
12 had good reason to say the missionaries had destroyed their  
13 culture, and I found out that, I think that, the big  
14 reason is that some of them like the Baptists, have led  
15 them to believe this idea ---  
16 They don't have to work, so it's nothing to do with it. But  
17 if they would get a Bible with concordance and a dictionary,  
18 they would find that the word "man" simply means "playboy".  
19 And we don't have to read the Bible to know that following the  
20 playboy's way of life just doesn't pay dividends. And when  
21 I told the Anglican clergyman what changes should be made,  
22 he said, what's that's all got to do with Christianity? So  
23 I warned him if that's the way he had figured out, he'd  
24 likely get himself into trouble. So some months later he got  
25 drowned in Mayo Lake, and there were there of them drowned  
26 in the same boat up at 1016 after refusing to go along with





1 the same idea.

2 MR. GOUDGE: I hesitate to inter-  
3 rupt you, sir, but I wonder if you have a question if you'd  
4 be good enough to phrase it so the Board could answer it.

5 MR. ARMSTRONG: Well, there, in  
6 dealing with the social impact. That's what I would like to  
7 explain. I was able to deal with this problem by having a  
8 social club in my camp instead of a beer parlour and offered  
9 my crew, entertainment that the Ontario Farmwoman's Institute  
10 Employees Club promoted in that part of the country and  
11 Inspector Hunter, who is formerly of the RCMP here, comes  
12 from the same part of Ontario that I do and he admitted  
13 that if it hadn't been for the 4-H Club and the Farm Women's  
14 Institute in that part of the country that they would have  
15 had the same problem that they have in northern Ireland right  
16 now. It was that organization that brought people together  
17 in a state of harmony to work together for the good of the  
18 neighbourhood.

19 I was able to almost eliminate  
20 the need for medicare in my camp and drunkenness was not a  
21 problem and the company manager told me I had set a record  
22 for keeping down unnecessary overhead, but when I moved camp,  
23 I was unable to get my social club rebuilt and that was  
24 when the situation became unmanageable.

25 So, I know what can be done to  
26 deal with the situation if we can get the co-operation, but



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1 up to the present time, you've the religious organizations that  
2 exist here nor all the Territorial, nor all the City Counsel  
3 have been going to back me up.

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1 on any program that would deal with the situation, but, I was  
2 talking to Frank Mooney tonight, who is the former manager of  
3 the NCPC, and he told me he'd be willing to co-operate in any  
4 way possible, to give my, to help re-organize my effort to deal  
5 with the situation, in regard to social impact and the manage-  
6 ment of your labour camps. Because I believe that the big  
7 deal is proper management and if I could do it single-handed,  
8 I don't see why you couldn't.

9 MR. GOUDGE: Thank you very much,  
10 Mr. Armstrong. I don't know if the witnesses have any response  
11 to that.

12 MR. CHAIRMAN: Well, sir, that would,  
13 there is, I see another hand, Mr. Goudge. Would you come for-  
14 ward please, m'am, to the microphone and ask, if I may, that  
15 you give your name.

16 Yes, Margaret Thompson and  
17 I'm President of the Native Women's Association of Canada and  
18 I'm listening to a lot of comments about acculturation and I  
19 disagree with a lot of things that are being said here. One  
20 of the points I'd like to say that I don't think that you can  
21 have trade-offs and I don't want to see this happen at the  
22 expense of the native people.

23 Number two, you haven't considered  
24 any alternatives. You're all assuming that you're going to  
25 go ahead with this pipeline. You haven't considered even  
26 discussing the ten year moratorium or the suggestions that were



1 taken or given by the CYI.

2 I disagree also that there's more  
3 than 425 that speak the native language in the Yukon. I'm  
4 sure there's twice that many people that use their language and  
5 they are forced to use the English language, simply because it  
6 is taught in school and they live in a basically white dominant  
7 society so they have to accept that type of lifestyle, or  
8 education.

9 I feel that the attitudes of the  
10 Government and the white dominant society have to change if you  
11 want to do some really effective, serious thinking towards the  
12 concerns of native people in this involvement. Are they really  
13 being involved? Are they really, are you really allowing them  
14 to have some in-put? I don't see very many native people here,  
15 for instance, tonight having any in-put.

16 I would like you not to compare this  
17 development with Scotland because I feel that that is, there is  
18 no comparison whatsoever, because it is an English speaking  
19 society -- this whole concept is based on that and there is no  
20 relevance whatsoever to what is happening in the Yukon.

21 Thank you.

22 MR. GOUDGE: Thank you very much,  
23 m'am. Again, I would ask the panel if they have any comments  
24 on that?

25 MR. TEMPLETON: Well, I think, I'm  
26 not sure I have all the points, one was the, first one I







1 believe, was the native claims and I don't think we're in any  
2 way trying to say that what we're doing is getting around the  
3 settlement of the native claims. I think if you'll look on the  
4 final paragraph of our letter of the main exhibit. We've  
5 said, "It is not practical for us to examine the native claim  
6 issue of the native people in adequate detail, however, it must  
7 be emphasized that it is an essential political factor that  
8 must be addressed by all directly concerned in a mutually  
9 satisfactory manner if the social benefits potentially avail-  
10 able from the proposed project are to be realized by northern  
11 peoples."

12 I think we have always felt that the  
13 settlement of the native claims was very significant part of  
14 the whole study, but I don't think that the fact that the na-  
15 tive claims are not settled should mean that we shouldn't start  
16 studying it, because it's pretty obvious these studies take a  
17 great deal of time, too, and should go on concurrently with the  
18 negotiation for the settlement of native claims.

19 I don't think that we've assumed that  
20 the pipeline will go ahead. I think we've said, in most places,  
21 if it goes ahead, these are the things that we anticipate.  
22 We're not recommending that the pipeline either go ahead or not  
23 go ahead, we're trying to predict impact.

24 I think the comment regarding the  
25 language, we're not justifying the fact that they speak English,  
26 it's a fact and we're not in any way trying to say that that's



1 the right thing or the wrong thing, that's the case. We're  
2 trying to, we're trying to work within the conditions as they  
3 are.

4 I don't know whether I've covered  
5 all the points, but those are all I noted.

6 MR. GOUDGE: Thank you, sir. That  
7 then, I think, would conclude our evening. I say that on the  
8 basis that I've consulted the Counsel that haven't yet gone  
9 ahead and put myself way out on a limb by relying on the pre-  
10 diction of four lawyers, as to how long they're going to take  
11 tomorrow. Assuming that they're in any sense right, we should  
12 be able, if we start at 9:30 promptly to be, to complete the  
13 cross examination of this panel tomorrow, in time to convenience  
14 these gentlemen.

15 So, I'd suggest, sir, that subject to  
16 what the Board may think, that we conclude now and adjourn  
17 until 9:30 in the morning.

18 MR. CHAIRMAN: Thank you, Mr. Goudge.  
19 We stand adjourned then until 9:30.

20 (PROCEEDINGS ADJOURNED).  
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26

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